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ABSTRACT

Questionnaire data gathered from 142 high school students in a rural Montana town were used to identify the sources of influence in setting occupational and educational goals and to analyze the amounts of information transmitted from various categories of significant others. Results showed that for both occupation and education, peers and, secondly, parents supplied the greatest amount of information. Teachers usually ranked a distant third, although they did not provide significantly more information than adult friends and other relatives and they frequently provided less information. Results showed a strong tendency for significant others to influence either occupation or education but usually not both. Researchers also found that sex, year in school, family socioeconomic status, residence, level of extracurricular activities, and level of occupational and educational aspiration were statistically significant variables, especially for occupation. Generally, parental occupational influence decreased and peer influence increased as students progressed through school, came from higher socioeconomic backgrounds, were more involved in school activities, and had higher aspirations. Also, males and females were significantly different in their sources of information for eduction and occupation, probably because of traditional socialization practices. (Author/SB)

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A COMPARISON OF THE SOURCES OF INTERPERSONAL INFLUENCE IN THE OCCUPATIONAL AND EDUCATIONAL ATTAINMENT PROCESS OF RURAL YOUTH

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SUMMARY

Over the past two decades, social scientists have thoroughly documented the importance of influential others in the setting of occupational and educational aspirations of high school youth. The purpose of this study is to identify the sources of influence and analyze the amounts of information transmitted from various categories of significant others (i.e., parents, friends, etc.) for a sample of rural Montana high school students. These significant others are identified separately for occupational and educational aspirations. The data was further analyzed to determine whether the sources of influence for these two aspirations vary according to the sex of the student, their year in school, family socioeconomic status, residence, level of extracurricular activities, and level of occupational and educational aspiration.

Overall, the data show that for both occupation and education, parents and peer friends supply the greatest amount of information. Teachers usually rank a distant third, but they do not provide significantly more information, and frequently less, than do adult friends and other relatives. While the amounts of information transmitted from the various categories of others was quite similar for occupation and education, there was also a strong tendency for the influence of individual others to be segmental: some were influential for occupation, some for education, but relatively few were for both.

When the sources of influence were examined controlling for the variables listed above, statistically significant differences were found

in virtually every case. These relationships, however, were stronger for occupation than they were for education. Generally, there occurred a consistent pattern of declining parental influence and increasing peer influence as the student progressed through school, came from higher SES backgrounds, were more involved in school activities, and had higher aspirations.

Of greatest significance were the differences between male and female students in their sources of information for the two aspirations. The findings are particularly important in light of the tendency for males and females to end up in very different locations in the occupational structure. Throughout the report, the differences between sources of influence for males and females and its impact on the achievement process is addressed. The evidence points in the direction of traditional socialization practices as productive of this outcome.

A Comparison of the Sources of Interpersonal Influence in the Occupational and Educational Attainment Process of Rural Youth

Introduction

During the past decade, research on the occupational and educational attainment process has increasingly utilized a social psychological model. One of the most important features of the widely used Wisconsin model is its focus on the role of interpersonal influence in mediating the effects of structural variables on status attainment. In its most general form the model postulates that socio-structural factors, such as family socio-economic status, exerts an influence over the set of others with whom one interacts and that information from those others exerts a direct influence on the educational and occupational aspirations of the individual (Haller and Portes, 1973). This model has proven quite successful in accounting for sizable percentages of the variation in aspirations which are in turn solid predictors of attainment (Woelfel and Haller, 1971; Sewell, et al., 1969). Given the importance of interpersonal influence in this process, it becomes important to know who are the sources of influence.

An adequate description and analysis of these sources of influence in the formation of occupational and educational aspirations clearly depends on the use of a valid technique for detecting the significant others for a sample of individuals. To date, however, many researchers have had a tendency to measure significant other influence by asking respondents how they perceive the expectations of various categories of

others. For example, students are often asked, "To what extent have your parents encouraged you to go to college" and/or "are most of your close friends going to college?" (See e.g. Sewell, et al., 1969). Typically, the expectations of parents and teachers and the aspirations of peers friends have been combined in an index of significant other influence (SOI). While these techniques have allowed researchers to assess the relative influence of parents, teachers and peers (Kandel and Lasser, 1969; Hauser, 1972) and the relative impacts of definers and models (Herriot, 1963; Picou and Carter, 1976), these studies rest on the assumption that most, if not all, information is transmitted through these sources.

The accuracy of this assumption has been questioned in the work of Woelfel and Haller (1971) who have developed a set of instruments which accurately detect the exact significant others for a sample of individuals and measure what it is they do or say that renders them influential. By combining the influence from all sources for each student Woelfel and Haller were able to substantially increase the explained variation in aspiration levels compared with earlier work using the parent, peer, teacher index. More important for purposes of this study, however, is Woelfel's (1972) analysis of the amount of information transmitted from various sources. Based on a sample of rural Wisconsin high school students, Woelfel showed that siblings, other relatives and adult adquaintances provided about 35% of the total information for occupational aspirations. Similarly, Mettlin (1975)

working with similar instrumentation, but somewhat different concepts of influence has shown that adult friends influence a larger number of students for occupation and education than do parents. And, J. C. Woelfel (1978) has shown that about 43% of a sample of white adolescents named an influential agent other than parents, peers, or teachers for their attitudes about four political topics.

While the above studies have been quite valuable in answering the question: "Who are significant others?", a number of important issues have not been dealt with. First, the Woelfel data dealt only with those indentified as occupational others, and Mettlin combined both occupational and educational others together. There is often an implicit assumption that since the educational and occupational structures are so closely related, then the patterns of interpersonal influence that hold in one area are presumed to hold in the other. This assumption needs to be examined. Second, the Woelfel data was based only on high school juniors and the sample was heavily skewed towards females, and Mettlins data was not broken down by sex or year. This is quite important in that a number of studies have shown that sources of influence vary substantially by sex and year (Denzin, 1966; L. Larson, 1972; W. Larson, 1971). Third, while Woelfel examined differences in role relationships of others to focal individuals by SES, residence and level of aspiration and found no significant differences, these results may have been affected by the skewed sex distribution. Therefore, these factors need to be reexamined controlling for the sex of

the focal individual. Finally, despite the importance attributed by theorists to the distinction among types of interpersonal influence (See e.g., Kelly, 1952; Merton, 1957), there is little evidence to date on whether some agents of influence are more likely to transmit information via the definer mode or via the modeling mode. This paper is an attempt to answer the above questions by analyzing the occupational and educational significant others for a sample of rural high school students.

Sample and Measurement Procedures

A. Sample

Data for this study were obtained from the responses of the entire high school student population in a rural Montana town (population, 1200). A modified form of the Wisconsin Significant Other Battery was administered to the students. This questionnaire asks each student to identify by name and relationship each individual to whom they had spoken about or whom they knew as examples of educational and occupational attainment (see below, Framework for Analysis). In addition to this data, the questionnaire also elicited standard background information such as year in school, sex, residence and parents occupation and education. Data was also obtained on each student's level of occupational aspiration (LOA) using the Haller and Miller Occupational Aspiration Scale (1971) and their level of educational aspiration (LEA) using a two item scale which tapped realistic and idealistic dimensions of aspiration (Haller and Woelfel, 1969).

In this sample, 152 students filled out the questionnaire and 142 usable forms were returned. The mean prestige scores for the occupations of the fathers of the students as measured by the Duncan SEI index (Duncan, 1961) was 63.35 with a standard deviation of 11.54. Males were slightly overrepresented in the sample (54.9%) and, as expected, the number of students declined for each year in school from 46 freshmen to 29 seniors. Most of the students lived within the city boundaries (71.7%) with the bulk of the remainder residing on farms. The mean level of occupational aspiration was 33.54 with a standard deviation of 11.57, and the average level of educational aspiration was 6.59 (out of a possible 10) with a standard deviation of 3.59. None of these figures appear to be out of line with what has typically been reported in aspiration studies done on rural areas.

B. Framework for Analysis

Central to this research is the conceptualization and measurement of significant other influence (SOI). The format followed in this study was originally put forth by Haller and Woelfel (1969) who developed a set of instruments designed to detect the exact significant others of occupation and education. Known as the Wisconsin Significant Other Batter (WISOB), these instruments have been well discussed and subjected to thorough validation research (Haller and Woelfel, 1972). In this framework, attitudes are viewed as conceptions of the relationship between self and the object in question (education and occupation). Significant others, then, are those persons who convey information to

the individual about self and/or object, usually by influencing the larger cognitive structures or filter categories upon which the definitions of self and object depend. It is further assumed, following Kelley (1952), that information is conveyed by those who hold expectations for ego (definers) and/or by those who serve as examples (models). This arrangement yields four modes of influence: definers for object and self and models for object and self. Any person who functions in one or more of these ways is considered as a significant other (SO) for the focal person. And, it follows that a distinct battery of questions are necessary to elicit the significant others for each attitude, in this case, occupational and educational aspirations.

This type of measurement allows for a number of techniques for assessing the amount of information transmitted from various sources and through different modes of influence. In this research, each other was categorized in terms of his/her relationship to the focal individual. For purposes of comparison the categories are virtually identical to those used by Woelfel (1972) and include parents, siblings, other relatives, peer friends, teachers, adult friends and employers. The measurement of influence for each role relationship category was accomplished as follows: First, each SO received a score of 1 if they were listed as an other, regardless of the number of modes through which that influence was transmitted. For the total sample, the number of persons listed in each role relationship category was then computed to yield a measure of frequency. A second measure of influence was

created by assigning one point for each mode through which influence was transmitted and then summing these scores. Thus, if a person was listed as providing influence through two modes, they would have an influence score of two. As above, this index was computed for each category of other to provide an index of influence. As a final measure of influence, the percentage of students who mentioned at least one other in each of the role relationship categories was computed. These measures allow for different interpretations of the sources of influence as will be clarified as the findings are presented. Each of the above measures was computed separately for occupational and educational others.

Findings

While the primary focus of this paper is on the sources of interpersonal influence for occupational and educational aspirations, a number of related issues are also addressed. Accordingly, we shall first examine the number of significant others for each student for occupation and education and then the relationship between the sex of the focal individual and that of their SOs. The question of role relationship will first be addressed by looking at the probability of others being attitude specific as opposed to the likelihood that they are significant for both occupation and education. Next, the question of amounts of influence and relationship will be direclty examined. And last, we will look at the relationship between various categories of others and modes of influence.

A. Number of Significant Others

How many significant others were identified by each student? In this data set, the students identified a total of 762 occupational others ($\bar{X}$ = 5.37, s = 3.46) and a total of 771 others for education ($\bar{X}$ = 5.43, s = 3.57). While these differences are clearly very small and not significant, there was a slightly larger difference in the average influence scores: for occupation the average influence was 8.08 (s = 5.54) while for education the mean score was 7.64 (s = 5.49). But this difference was not statistically significant either.

One of the strongest factors affecting the number of SOs was the sex of the focal individual. As can be seen in Table 1, overall females identified more SOs and had higher influence scores than did males. It is interesting to note that while male - female differences held for

Table 1. Average number of significant others and average influence per focal individual for occupation and education by sex of student.

Sex of Student	Occupation Num.	Occupation Infl.	Education Num.	Education Infl.	Differences between occupation and education Num.	Differences between occupation and education Infl.
Male (n=78)	4.94	7.29	4.51	6.21	<.09	<.02
Female (n=64)	5.89	9.05	6.55	9.39	<.06	>.25
p*	<.06	<.04	<.001	<.001		

*all probabilities are for one tailed tests.

both occupation and education, they are stronger for education. And when occupational and educational influence is compared, it appears that occupation is more salient for males while education is more salient for females. Caution should be used here, however, for these differences, with the exception of influence scores for males, are not particularly large.

To find out whether number of significant others is related to any other factors, we looked at a number of student characteristics. The data are reported in Table 2 and 2A. The first thing to note is that, for the most part, the number and influence scores increase linearly for all the ordered variables. So, for example, the higher the aspiration level the larger the number of SOs per student. Another general trend is that the male - female differences discussed above tend to hold rather consistently. In fact, out of 32 comparisons between the mean number and influence scores for males and females, females exceed males 24 times in the case of occupational others, and 30 times for educational others. For occupation, however, only 10 of the 24 differences are statistically significant, while 26 of the 30 differences for education are. Finally, we note that the differences between the number of occupational and educational SOs are almost nonexistent. When controlling for sex we find that males generally have more occupational others than educational others (28 of 32 comparisons) while for females the opposite holds (26 of 32 comparisons). Nevertheless, only a handful of these differences are significant. It is interesting, though that

Table 2. Average number of significant others and average influence per focal individual for occupation and education by selected student characteristics

Sample characteristic	Occupation Number	Occupation Influence	Education Number	Education Influence	Difference between occupation and education (probabilities*) Number	Difference between occupation and education (probabilities*) Influence	N
Year in school							
Freshman/sophomore	4.51	5.40	4.48	6.14	>.80	>.50	80
Junior/senior	6.47	10.26	6.66	9.58	>.60	>.30	62
p	<.01	<.01	<.01	<.01			
Socioeconomic status							
Low	5.28	8.06	5.28	7.17	>.90	<.20	47
Medium	4.61	6.70	5.40	7.49	<.10	<.30	43
High	6.20	9.40	5.78	8.48	<.40	<.20	50
p	<.09	<.07	<.80	<.50			
Residence							
Farm	5.42	8.27	5.36	7.88	<.90	<.60	33
Town	5.12	7.73	5.23	7.24	<.80	<.30	101
p	<.70	<.60	<.90	<.50			
Extra curricular activities							
Low	3.76	5.35	3.61	4.69	<.70	<.25	54
Medium	5.85	8.75	5.66	8.12	<.70	<.40	59
High	7.38	11.38	8.35	12.17	<.20	<.80	29
p	<.01	<.01	<.01	<.01			
Level of Occupational Aspiration							
Low	4.59	7.28	4.59	6.32	<1.0	<.15	54
Medium	5.67	7.86	6.09	8.37	<.50	<.60	35
High	6.62	10.05	6.17	8.86	<.40	<.10	42
p	<.02	<.05	<.06	<.06			
Level of Educational Aspiration							
Low	3.61	5.47	3.87	5.05	<.60	<.50	38
Medium	5.83	8.79	6.10	8.39	<.60	<.60	52
High	6.20	9.23	5.92	8.79	<.60	<.50	52
p	<.01	<.01	<.01	<.01			

* All probabilities are two-tailed tests.

Table 2A. Average number of significant others and average influence per focal individual for occupation and education by selected sample characteristics and sex of student.

Sex of student	Sample characteristic	Occupation		Education		Difference between occupation and education (probabilities*)		N
		Number	Influence	Number	Influence	Number	Influence	
	Year in school							
Male	Freshman/Sophomore	4.68	6.73	3.91	5.23	<.06	<.01	44
	Junior/Senior	5.27	8.03	5.29	7.47	>.90	<.50	34
	p	<.40	<.20	<.01	<.01			
Female	Freshman/Sophomore	4.31	6.00	5.17	7.25	<.03	<.08	36
	Junior/Senior	7.93	12.96	8.32	12.14	<.70	<.50	28
	p	<.01	<.01	<.01	<.01			
	Socioeconomic status							
Male	Low	5.07	7.43	4.61	5.89	<.40	<.07	28
	Medium	4.48	7.00	4.71	6.86	<.70	<.90	21
	High	5.21	7.46	4.43	6.25	<.20	<.15	28
	p	<.70	<.95	<.90	<.70			
Female	Low	5.58	9.00	6.26	9.05	<.30	<.95	19
	Medium	4.73	6.41	6.05	8.09	<.10	<.01	22
	High	7.46	11.86	7.50	11.32	<.95	<.70	22
	p	<.08	<.05	<.60	<.30			
	Residence							
Male	Farm	4.62	6.48	4.48	6.05	<.80	<.60	21
	Town	4.94	7.54	4.54	6.33	<.30	<.05	54
	p	<.70	<.40	<.95	<.80			
Female	Farm	6.83	11.42	6.92	11.08	<.95	<.90	12
	Town	5.32	7.96	6.02	8.28	<.20	<.70	47
	p	<.15	<.05	<.50	<.15			
	Extracurricular Activities							
Male	Low	4.31	6.11	3.83	5.00	<.30	<.08	36
	Medium	5.81	8.84	4.94	6.96	<.10	<.03	31
	High	4.55	6.82	5.55	8.00	<.20	<.30	11
	p	<.10	<.03	<.05	<.02			
Female	Low	2.67	3.83	3.17	4.06	<.40	<.90	18
	Medium	5.89	8.64	6.46	9.39	<.40	<.50	28
	High	9.11	14.89	10.06	14.72	<.40	<.90	18
	p	<.01	<.01	<.01	<.01			

Table 2A (continued)

	Level of Occupational Aspiration							
Male	Low	4.47	6.97	4.06	5.38	<.50	<.03	32
	Medium	4.56	6.28	4.28	5.83	<.60	<.60	18
	High	6.14	8.68	5.14	7.14	<.10	<.15	22
	p	<.08	<.20	<.20	<.20			
Female	Low	4.77	7.73	5.36	7.68	<.40	<.95	22
	Medium	6.88	9.53	8.00	11.06	<.30	<.30	17
	High	7.15	11.55	7.30	10.75	<.90	<.50	20
	p	<.15	<.20	<.20	<.25			
	Level of Educational Aspiration							
Male	Low	3.65	5.85	3.73	4.89	<.90	<.25	26
	Medium	5.48	7.78	4.91	6.57	<.40	<.15	23
	High	5.66	8.21	4.90	7.10	<.20	<.20	29
	p	<.02	<.11	<.12	<.06			
Female	Low	3.50	4.67	4.17	5.42	<.40	<.40	12
	Medium	6.10	9.59	7.00	9.83	<.20	<.90	29
	High	6.87	10.65	7.22	10.91	<.60	<.80	23
	p	<.07	<.03	<.12	<.07			

* All probabilities are two-tailed tests.

the majority of these significant differences occur for males at the lower levels of SES, aspiration and extra-curricular activities. It is for these persons for whom education is probably the least salient and entry into the world of work the most immediate.

The finding that females have more significant others than do males calls for some explanation. The first question that arises here is whether or not this relationship is spurious. One way to answer this question is to begin with the observation that, all else being equal, the number of SOs a person has is related to the likelihood of interaction and communication concerning the attitude in question. Thus, it would be reasonable to argue that the older the student, the higher the SES of one's family, the higher the aspiration level and the higher the level of extracurricular activities, the more occupational and educational SOs a person will name as this data indeed shows. If it should also be the case that females are more likely than males to be in these categories, then the observed relationship between number of SOs and sex would be a spurious one. In order to test this interpretation, we regressed the number of significant others for occupation and education on the variables included in Table 2. The results of this regression analysis (presented in Table 3) indicated that the spuriousness argument holds for occupation, but not for education. The data clearly show that when all other variables are controlled, number of extracurricular activities is the most important factor affecting the number of SOs. There are, however, some differences between occupation and education.

For occupation, the effect of sex is virtually nonexistent, while year in school does have an important independent effect. On the other hand, when all other variables are controlled, sex still has an effect on the number of educational SOs, while year in school has much smaller effects.

Table 3. Multiple correlations, standardized regression coefficients and correlation coefficients for number and influence of significant others regressed on selected student characteristics.

Independent Variables	Occupation				Education			
	Number		Influence		Number		Influence	
	B	r	B	r	B	r	B	r
Sex	.084	.18	.095	.20	.227*	.34	.229*	.34
School Year	.210*	.40	.238*	.44	.157*	.35	.138*	.35
Family SES	.071	.14	.053	.13	-.009	.08	.050	.12
Residence	-.044	-.07	-.030	-.07	.007	-.05	-.045	-.08
Number of Activites	.291*	.48	.358*	.54	.358*	.52	.375*	.55
LOA	.065	.25	.029	.22	.048	.20	.038	.21
LEA	.092	.30	.065	.28	.049	.25	.059	.28
R	.541		.592		.582		.665	
R^2	.293		.350		.338		.365	

*Significant at .05 level.

Why should it be that females have more significant others than do males for education even after controlling for all other variables? An examination of the sex role socialization literature as it relates to

vocational aspirations suggests a plausible explanation (see e.g., Weitz, 1977:89; Angrist, 1969:226). Following this approach, education for males is seen as instrumentally related to occupational aspirations. Thus, once one's occupational choices start to be narrowed (and this apparently occurs fairly early for males), the amount of information they receive about education is probably focused on that which is relevant given the occupational goal(s), although the amount should increase with year in school. While the socialization of males is directed towards work, that of females tends to stress the marital role. Thus education is less concretely relevant to a future vocational status and probably remains open to a larger range and amount of influence which should also increase with year in school.[1]

This argument receives at least partial support from the data on number of SOs and year in school presented in Table 2. One of the clearest findings here is that both number and influence scores increase as students become upperclassmen, suggesting that these topics become more salient as one gets older. These data are more interesting, however, when we control for sex. It appears that the major reason for the increase in occupational others is due to the dramatic increase for females as they reach the junior and senior years. While the number of others for education increases over the school years for both males and females, a regression analysis suggests that most of the female increase is due to a greater involvement in extracurricular activities. This is not the case for males. Finally, we note that for freshman and sophomores there

is a significant difference between the numbers of occupational and educational SOs and this difference varies by sex. Apparently, males are concerned first with occupation (what they want to do) and then later with education (how they are going to do it). For females, it is occupation that increases in importance. This is consistent with the above interpretation of male - female differences.

In examining the remainder of the data in Table 2 it can be seen that there are small or nonexistent differences in number of SOs for both SES and residence. For SES, the only differences that can be observed are for occupation and this appears to be entirely due to high status females. In the case of residence, farm females have more SOs than do those who live in town, but these differences are rather small. In the case of males, there are no differences between those who live on a farm and those who live in town.

As we have already noted, of all the factors related to occupational and educational aspirations, the number of extracurricular activities is the most important factor affecting the number of SOs. As the data in Table 2 show, both number and influence scores increase as number of activities increase, but these increases are much stronger for females than for males. Involvement in such activities obviously broadens the base for interaction within the school and this apparently has its greatest effect on females. This is especially true at the lowest activity level where males have more occupational SOs than do females. Conversely, at the highest activity levels, females have more significant

others than do males and this holds for both occupation and education.

The final factor to examine in Table 2 is the effect of the aspiration variables on the number of significant others. For both occupation and education, the number and influence scores increase as aspiration level increases. Again, however, there are some differences in the patterns when controlling for the sex of the focal individual. For females, educational aspiration level has a stronger relation to the number of SOs than does LCA. In the case of males, both types of aspiration are related to the number of SOs. This is again consistent with the sex role socialization interpretation discussed earlier.

B. Sex of Significant Others

Although the data was limited to parents, siblings and peer friends, Woelfel (1972) has shown a clear tendency for people to choose significant others of the same sex. While this finding is not surprising, and our data confirms it, at the same time some interesting patterns emerge when we look at the choice of SOs by sex for occupation and education separately. For example, as Table 4 shows, males are more likely to choose same sex SOs than are females, but the differences are stronger for occupation than education. So while the choice of same sex SOs is important, it is especially salient for males in the case of setting occupational aspirations.

The data are more interesting, however, when one examines the sex of significant others and that of the subjects for different role relationship categories. As Table 5 shows, with one exception, males

Table 4. Percent of student choosing significant others of the same sex for occupation and education.

Sex of Student	Occupation	Education
Male	83.9% (384)	73.9% (352)
Female	61.3% (377)	62.3% (419)
	X^2 = 163.62, 3 d.f.	X^2 = 100.74, 3 d.f.
	p < .001	p < .001

Table 5. Percent of students choosing significant others of the same sex by relationship of student to other.

Relationship to Other	Occupation		Education	
	Male	Females	Male	Females
Parent	64.3 (112)	50.0 (102)	54.8 (93)	55.2 (96)
Sibling	75.0 (28)	55.0 (40)	57.8 (45)	50.0 (54)
Other Relative	90.9 (33)	72.1 (43)	81.6 (38)	62.1 (66)
Peer Friend	93.3 (120)	86.8 (106)	80.5 (118)	76.0 (150)
Teacher/Counselor	88.9 (27)	48.1 (99)	89.7 (39)	40.0 (38)
Adult Friend/ employer	93.9 (49)	39.3 (28)	100.0 (15)	45.5 (11)

were more likely to select same sex SOs than are females in each role relationship category. But again, the differences are stronger for occupation than education. In fact, all of the differences between males and females for occupation are significant, while for education there are no significant differences for parents, siblings and peer friends, ($P < .05$, one-tail). It is also interesting that in a few cases focal individuals were more likely to choose a person of the opposite sex as a significant other and this phenomena occurred only for females. The case of teachers is particularly interesting because there was not a sizable difference between the number of male and female teachers that were listed by students: of 37 different teachers named, 21 were male and 16 were female. Nevertheless, one of those teachers, who served as a school guidance counselor and was also a male, was clearly a major source of influence.

This set of findings has some interesting implications for sex role stereotyping in career choice for both males and females. Several writers (see e.g., Thorenson et al, 1967; Grambs and Waetjen, 1975) have pointed to the role of teachers and counselors in giving sex-stereotyped advice regarding career choice and to the centrality of role models in this process. While the sex of the influential other does not tell us about the content of the information that is provided, the pattern of males overwhelmingly obtaining information from others of the same sex, especially for occupation, while females are less likely to do so, suggests the likelihood of males being aimed in

traditional sex typed directions while females have a shortage of adequate role models.

The position of role models becomes more evident when one examines the likelihood of choosing same sex others by the mode through which the influence was transmitted. Table 6 shows, the pattern of ego choosing same sex others, especially for males and occupation, generally holds for each mode of influence. More important, however, are the differences

Table 6. Percent of students choosing significant others of the same sex by mode of influence and sex of student.

Mode of Influence	Occupation		Education	
	Male	Female	Male	Female
Definer - object	76.2	55.9	69.8	62.2
Model - object	97.2	55.3	70.1	49.0
Definer - self	80.3	62.0	73.0	55.8
Model - self	93.9	92.2	84.7	90.1

between models and definers for males and females. In the case of male students, occupational others who are models are more likely to be of the same sex than are definers. For females, the distinction between models and definers by sex is not nearly as important, except in the case of model for self. Of particular interest is the selection of model for object (which focuses on achievement models). It is here that we see the largest differences between males and females, especially for occupation. Once again, it raises the issue of sex biased influence

in the attainment process.

An analysis of the sex of significant others by sex of the focal individual was done for all the variables reported earlier and the data is presented in Table 7. With the exception of number of activities for educational others, the remaining differences are not significant. By and large, these data show a tendency for students to reduce the choice of same sex others as their status on each of the ordered variables increases. But since these differences are so small, it appears that the tendency to choose same sex SOs, more so for males and occupation than for females and education, is remarkably constant.

C. Similar Attitudes, Different Significant Others?

The analysis in the preceding section suggests that the sources of influence for occupation and education are likely to differ. This raises the question of what is the likelihood that any given significant other will be named as a source of information for both occupation and education as opposed to being influential for only one of these attitudes.

Previous research has demonstrated that the educational and occupational structures are so closely related that students seem to take occupational aspirations into account when setting their educational aspirations and vice-versa (Woelfel and Haller, 1971). Given this close relationship, it would be expected that the sources of interpersonal influence for each aspiration should overlap to a considerable degree. And indeed, this is often an implicit assumption of status

Table 7. Percent of students choosing significant others of the same sex for occupation and education by selected student characteristics and sex of student.

Sample characteristic	Occupation		Education	
	Males	Females	Males	Females
Year in school:				
Freshman/sophomore	82.5	58.1	75.6	64.5
Juniors/seniors	85.4	63.5	72.2	60.5
Residence:				
Farm	81.4	63.4	67.0	61.4
Town	86.0	60.4	75.9	62.2
Family SES:				
Low	85.2	66.0	72.1	65.5
Medium	83.9	55.8	77.8	60.9
High	82.9	62.2	72.8	61.2
Educational Aspiration:				
Low	86.2	64.3	76.3	56.0
Medium	85.7	63.3	72.6	66.0
High	81.1	58.2	73.2	59.6
Occupational Aspiration:				
Low	83.9	62.9	73.8	61.9
Medium	86.4	61.5	70.1	62.5
High	83.0	58.7	77.0	60.3
Number of Extra-curricular activities:				
Low	83.1	60.4	76.1	73.7
Medium	83.9	62.4	74.5	58.0
High	86.0	60.4	67.2	63.0

attainment research (Haller and Woelfel, 1969:69). Despite the logic of this position, social psychological theory provides sound reasons for leaving the question open to empirical examination.

An examination of the origins and development of the concept of significant other suggests why this should be the case. The term very likely owes it origins to Henry Stack Sullivan (1940). And, as Cottrell and Foote (1952:191) point out, in the context of self theorists Sullivan's concept of the significant other reflected the fracturing of community in modern societies such that "the generalized other has broken down into clusters of significant others". Thus, in a highly segmentalized world, the individual's various attitudes are going to depend on interaction with specific others persons who are influential. Or, as Haller and Woelfel (1972) have cogently argued, significant other influence is assumed to be segmental "with the possibility open of different significant others influencing different areas of self conception, or even different attitudes". The notion of segmentalized influence is also implicit in Kuhn's distinction between orientational and role specific others (1964), but has received little empirical attention.

Nevertheless, it would seem that if the objects of two attitudes are closely related, as are occupation and education, then the sources of influence should overlap to a considerable, but unknown, extent. On the other hand, if the attitudes are unrelated or if one is dealing with differing aspects of a persons self conception, then there should be much less overlap in influential sources. While there is some

evidence for this latter point (Lenzin, 1966; Brookover and Erickson, 1975:305-308), there is surprisingly little data on the first. J. C. Woelfel's article on political socialization does however contain some suggestive data. Woelfel (1978) examined the sources of information for four political topics and found that some agents of influence appear to be object (attitude) specific. But since this data was presented by category of other (for example, the percent of parents who were mentioned as others for each topic), it does not provide an accurate measure of overlapping influence.

Fortunately, our data allow for a direct analysis of this problem and, as the data in Table 8 show, the results are surprising. For example, the probability of a significant other being both an educational and occupational SO for any given student is .314. While this is a fair

Table 8. Probability of a source of influence being a specific type of other for the total sample and by sex of student.

	Type of Other		
	Occupation only	Education only	Occupation and Education
Total sample	.339	.347	.314
Males	.388	.330	.282
Females	.292	.363	.345

amount of overlap, it is not nearly as much as one would expect for the particular attitudes under investigation. In fact, for those named as

SOs, the probability that any one is an object specific other for occupation or education is greater than the probability that they exert influence over both aspirations. And, when we look at the data controlling for sex, it suggests that the occupational and educational attainment process differs for males and females with respect to the sources of influence. For example, female students are more likely to have others who are influential over both attitudes than are males. It is also interesting that males are most likely to have object specific others for occupation, while females are most likely to have object specific others for education.

The surprising degree to which significant others are attitude specific supports the need to elicit the specific sources of influence for each attitude, even when those attitudes are closely related. It should also be clear that the checklist types of instruments that elicit SOs (i.e., parents, friends, etc.) not only miss many important sources, but are based on the mistaken assumption that all others in these categories are influential for both types of aspirations. While it is indeed likely that parents and peers as classes of influential others are significant for both occupation and education, it is also likely that within these classes some individuals are significant for occupation, some for education and some for both.

This pattern can be seen very clearly in Table 9 which shows the probabilities of being listed as a specific type of other by role relationship. This table clearly shows why the probabilities of being

Table 9. Probability of a source of influence being a specific type of other by relationship of other to student.

Relationship to student	Type of Other: Occupational Only	Educational Only	Occupational and Educational	Number of Others
Father	.288	.068	.644	132
Mother	.152	.188	.661	112
Brother	.185	.400	.415	65
Sister	.179	.482	.339	56
Other relative	.273	.469	.259	143
Peer friend-same sex	.389	.404	.208	342
Peer friend-opposite sex	.145	.681	.174	69
Teacher	.412	.397	.191	131
Adult friend	.658	.151	.192	73
Employer	.941	.059	.000	17
Unspecified	.704	.222	.074	27

influential for both aspirations are so small and points to some of the ways that the sources of influence for occupation and education are different. For example, both mothers and fathers have a high probability of being significant for both occupation and education. For those who are not, however, fathers are more likely to be occupational others only, while mothers are about equally likely to be both types. On the other hand peer friends, who constitute a large source of the total influence over both aspirations, are much more likely to be object specific - being either an educational or occupational SO, but not both. And peer friends of the opposite sex are most likely to be educational others only. Teachers fall in the same category as do same sex peers, being one type or the other, and adult friends and employers are most likely to be occupational others only.

Table 10 presents the same type of data for male and female students. While the overall patterns are similar to that found in Table 9, there are some important differences between males and females. In particular, females are more likely to have others of both types than are males, but the differences are especially noticeable for mothers and sisters. Apparently, mothers are more likely to be object specific others for male students than they are for females. It is also interesting to note the role of teachers. For males, they are most likely to be named as educational others only, while for females they are most likely to be occupational others. Even though teachers do not supply a particularly large amount of influence, as will be shown in the next section, their

Table 10. Probability of a source of influence being a specific type of other by relationship of other to student and sex of student.

Relationship to student	Sex of Student	Type of Other: Occupational Only	Educational Only	Occupational and Educational	Number of Others
Father	M	.311	.027	.662	74
	F	.259	.121	.621	58
Mother	M	.236	.273	.491	55
	F	.070	.105	.825	57
Brother	M	.235	.382	.382	34
	F	.129	.419	.452	31
Sister	M	.136	.682	.182	22
	F	.206	.353	.441	34
Other Relative	M	.333	.421	.246	57
	F	.233	.500	.267	86
Peer friend - same sex	M	.466	.371	.163	178
	F	.305	.439	.256	164
Peer friend - opposite sex	M	.115	.692	.192	26
	F	.163	.674	.163	43
Teacher	M	.316	.526	.158	57
	F	.486	.297	.316	74
Adult friend	M	.667	.111	.222	45
	F	.643	.214	.143	28
Employer	M	1.000	.000	.000	10
	F	.857	.143	.000	7
Unspecified	M	.765	.118	.118	17
	F	.600	.400	.000	10

differential importance for males and females is of interest especially in light of the tendency for females to select opposite sex teacher SOs discussed earlier.

Table 11 shows the probability of specific types of others for a number of student characteristics. Much of this data will become more clear in the next section when we examine sources of influence by role relationship. For the present it is of interest to point out that juniors and seniors are more likely to have the same others for both occupation and education than are freshman and sophomores, students from farms more likely than those who live in town, those with high aspirations more so than those with low aspirations, and those with a high number of extracurricular activities more so than those with a lesser number.

The data presented in this section indicate quite clearly that the sources of interpersonal influence differ for occupation and education. Furthermore, it appears that they are important differences by sex, and the sources of influence will vary by a number of other factors as well. On a theoretical level, this data is strong evidence of the need for more research into the extent to which interpersonal influence is segmental.

D. Amount of Influence and Role Relationship

The probability data discussed above suggests quite clearly that there are differences in the sources of interpersonal influence between the occupational and educational realms, and that there are important differences by sex as well. In order to more fully explore these

Table 11. Probability of a source of influence being a specific type of other by selected student characteristics.

Sample characteristic	Type of Other: Occupational Only	Educational Only	Occupational and Educational
Year in school:			
Freshman/sophomore	.400	.354	.286
Junior/senior	.321	.340	.339
Socioeconomic status			
Low	.335	.335	.330
Medium	.303	.405	.291
High	.365	.319	.316
Residence			
Farm	.330	.322	.348
Town	.337	.356	.308
Extracurricular activities			
Low	.385	.360	.256
Medium	.340	.318	.342
High	.292	.380	.327
Level of occupational aspiration			
Low	.351	.351	.298
Medium	.328	.372	.300
High	.360	.312	.329
Level of educational aspiration			
Low	.332	.377	.291
Medium	.343	.370	.287
High	.339	.309	.352

differences, we turn now to an analysis of who are significant others in terms of their role relationships, i.e., in what capacity is influence transmitted? Table 12 shows the relative amounts of influence by role relationship for occupation and education. In this and subsequent tables data will be presented on the percentage of others in each role category, the percentage of influence exerted via these categories of others, and the percentage of students who list an other in each of the categories. In Table 12, for example, one finds that fathers accounted for 16.1% of the occupational others, provided 21.3% of the influence, and were mentioned as an other by 83.8% of the students.

A brief examination of this data shows that overall there is a fair amount of similarity between sources of influence for occupation and education: the Spearman rank order correlation between the ordering of role categories for occupation and education is .806 for frequency and .903 for influence. Nevertheless, a close examination of the data as well as the significant chi-square value[2] show some important differences in sources of influence for the two aspirations. In the first place, fathers are listed more frequently than mothers for occupation, while the two parents are named about equally for education. When this is combined with the differences between siblings and the two types of peer friends, it becomes evident again that sex of the other is more important in the choice of occupational SOs than it is for educational others. Finally, as expected, adult friends and employers are more likely to be identified as occupational others than as educational others. And, in general, adults appear to be more important for occupation than for education.

Table 12. Relationship of occupational and educational significant others to the subject by frequency, influence index and percent mention.

Relationship of significant other to subject	Frequency (%)		Influence Index (%)		Percent Mention	
	Occupation	Education	Occupation	Education	Occupation	Education
Father	16.1	12.2	21.3	15.5	83.8	65.5
Mother	11.9	12.3	13.4	14.8	62.0	66.2
Brother	5.1	6.9	4.6	7.5	21.8	31.7
Sister	3.8	6.0	3.5	6.4	17.6	28.9
Other relative	10.0	13.5	9.8	11.2	33.8	39.4
Peer friend - same sex	26.8	27.1	24.6	24.6	62.7	62.0
Peer friend - opposite sex	2.9	7.7	2.4	7.2	11.3	25.4
Teacher	10.4	10.0	9.8	8.5	38.7	38.0
Adult friend	8.1	3.2	7.1	3.5	28.2	14.1
Employer	2.1	0.1	1.6	0.1	9.2	0.7
Unspecified	2.8	1.0	2.0	0.8	----	----
Totals	762	771	1148	1085		
	$X^2 = 59.95$, $p < .05$ $v = .200$		$X^2 = 85.72$, $p < .05$ $v = .197$			

Turning to the similarities between these two patterns, it is interesting to observe the importance of peers relative to parents. The lower ranking of parents compared to peers as a source of information is not too surprising in light of the fact that a student can list any number of friends but typically has only two parents that can be mentioned. Thus the amount of influence from all peer friends at any given time exceeds that of either father or mother, and is often larger than that of both parents together. It is also interesting to observe the strong showing of other relatives and adult friends and employers, categories that are not included in the parent, teacher, friends checklist that is typically used to measure interpersonal influence. Finally, we should note the relatively weak showing of teachers and counselors. Apparently, students receive most of their information about occupation and education from persons other than those whose official job it is to provide this data. This finding is not unusual (Larson, 1971; Woelfel, 1972), but it does imply that counselors must take into account previously existing influence patterns when counseling students. Much attitude formation theory, and particularly that based on notions of balance (Heider, 1946; Festinger, 1957) implicitly argues that if counselors direct a student towards careers that are not consistant with information provided by others in their interactive network, then counseling will have a minor impact at best.

When considering the relative influence of parents, peers and teachers, it should be pointed out that the methods employed to this point may be somewhat misleading. Measuring influence in different ways can produce other results. For example, Woelfel (1972) has clearly pointed

out that WISOB picks up contemporaneous and segmental influence. But, parental influence has operated over a long period of time (the composition of peer group changes), and is more likely to extend over many attitudes (note the high probability of being both occupational and educational SOs). So the data can be easily be distorted by those students who list a large number of friends and this obscures those instances where no friends at all are mentioned. The effects of this can be seen in the last two columns of Table 12 which show the proportion of students who name an other in each role relationship category. Thus, peer friends who constitute the largest influence category, are not mentioned at all by about thirty eight percent of the students.

Another way of looking at significance has been suggested by Mettlin (1975). If we take the significant other as the unit of analysis, the importance of each other can be evaluated in terms of the number of students they influenced and by the scope of their influence, as measured by the number of modes through which influence was transmitted. The results of this kind of analysis provide further insights into the positions of various agents of influence. Table 13 shows the average number of persons influenced (number) and the average number of modes of influence through which influence was transmitted (scope) by an other in each role relationship category. Note that teachers, on the average, influenced the largest number of persons - more than twice as many as did the average peer friend. On the other hand, an examination of the average scope scores highlights the significance of parents. For example, fathers exerted influence over occupational aspirations through an average of about two

modes, while the comparable figure for peer friends was considerably less. As one might expect, the correlation between the number and scope scores is close to zero.

The results of this analysis point to three different influence patterns (Mettlin, 1975 and Haller and Woelfel, 1972). First, there are those classes of others who as individuals have little influence on a person, but whose

Table 13. Average number of students influenced and average scope of influence by role relationship for occupation and education.

Relationship of other	Occupation		Education	
	Number	Scope	Number	Scope
Father	1.34	2.01	1.29	1.79
Mother	1.20	1.67	1.27	1.63
Brother	1.05	1.36	1.15	1.55
Sister	1.04	1.38	1.10	1.46
Other relative	1.03	1.47	1.08	1.16
Peer-same sex	1.43	1.37	1.39	1.26
Peer-opposite sex	1.10	1.25	1.31	1.36
Teacher	2.82	1.34	2.85	1.08
Adult friend	1.11	1.33	1.04	1.50
Employer	1.07	1.13	1.00	1.00

numbers makes their net influence great. Peer friends fall into this category. Second, there are SOs who have little influence on any one student, but from the perspective of the social system have a large effect

because they influence many. For occupation and education, teachers are most likely to be in this category. And third, there are others who influence only one or two students, but do so at a high level by virtue of exerting influence through multiple modes. Parents are in this category. So the question of who is most important depends upon the perspective that is taken.

Perhaps the most obvious impression that one gets from the data in Table 12 and 13 is that, despite some important differences in sources of influence for the two aspirations, the rankings of categories of others is remarkably similar regardless of the measure of influence. This appears to be at odds with the probability data presented earlier which showed some sizeable differences. What the two sets of data show is that, to a large degree, students are choosing significant others from the same role categories about equally for occupation and education, but they are choosing different individuals within those categories. So, for example, peers account for about 27 percent of the influence for both occupation and education, but the probability data clearly shows that these are not the same individuals for both attitudes.

Do these apparent similarities and differences in sources of influence for occupation and education hold up when we control for sex of the student? Given the same sex pattern in choice of others as well as the probability data described earlier, it should not be surprising that there are different patterns in sources of influence for males and females. Table 14 shows the amount of influence from various sources for males and females for occupation and education respectively.

Table 14. Relationship of occupational and educational significant others to the subject by frequency, influence indes and percent mention controlling for sex of subject.

Relationship of significant other to subject	Sex of Subject	Frequency (%)		Influence Index (%)		Percent Mention	
		Occupation	Education	Occupation	Education	Occupation	Education
Father	M	18.7	14.5	27.4	19.8	91.0	64.4
	F	13.5	10.3	15.2	12.0	75.0	65.6
Mother	M	10.4	11.9	10.4	14.7	50.0	52.6
	F	13.5	12.6	16.4	15.0	76.6	82.8
Brother	M	5.5	7.4	4.7	7.4	21.8	26.9
	F	4.8	6.4	4.5	7.5	21.9	37.5
Sister	M	1.8	5.4	1.4	5.0	6.4	21.8
	F	5.8	6.4	5.5	7.5	31.3	37.5
Other Relative	M	8.6	10.8	8.3	8.5	26.9	33.3
	F	11.4	15.8	11.2	13.3	42.2	46.9
Peer friend same sex	M	29.1	27.0	24.6	23.1	62.8	59.0
	F	24.4	27.2	24.5	25.8	62.5	65.6
Peer friend opposite sex	M	2.1	6.5	1.6	6.0	7.7	19.2
	F	3.7	8.6	3.1	8.2	15.6	32.8
Teacher	M	7.0	11.1	7.2	9.7	24.4	35.9
	F	13.8	9.1	12.4	7.5	56.3	40.6
Adult friend	M	10.4	4.3	9.3	4.8	32.1	15.4
	F	5.8	2.4	5.0	2.5	23.4	12.5
Employer	M	2.6	0.0	2.1	0.0	11.5	0.0
	F	1.6	0.2	1.0	0.2	6.3	1.6
Unspecified	M	3.9	1.1	3.0	1.0	---	---
	F	1.6	1.0	1.0	0.7	---	---
Totals	M	385	352	569	484		
	F	377	419	579	601		
Occupation:		X^2= 31.95, < .05 v=.208		X^2= 64.85, < .05 v=.240			
Education:		X^2= 11.71, < .30 v=.124		X^2= 27.81, < .05 v=.161			
				X^2adj= 19.62, p < .05			

In the case of occupational others, the sex of the other is clearly quite important. For example, note that fathers are much more important than mothers for males, while they are roughly equal in importance for females. The importance of fathers for males is seen dramatically by their position on each of the indicators used in this analysis. The sex linked differences can also be seen in the choice of siblings and, to a lesser extent, among peer friends. In general, as was shown earlier, the sex of the other is much more important for male students than it is for females, at least as far as occupation is concerned.

Two other differences stand out when looking at the sources of influence for males and females for occupation. These are the relative importance of adult friends and employers for males and the significance of teachers for females. It is not surprising that male students turn to adults whom they know for information about occupation, and we suspect that the male - female difference here is due to the socialization process discussed earlier. It is, however, somewhat surprising to find that teachers are more important for females than for males. In fact, teachers are mentioned as SOs by more than half of the female students compared to about a quarter of the males. The reasons for this are not entirely clear but it is most likely due to teachers serving as occupational role models for females. Whatever the reason, the fact that females turn to others outside of their immediate circle of family and friends for information about occupation could have important implications. It may open up more possibilities for a wider range of occupational choices

including those not available within the community. The role of teachers as significant others for occupation for females requires more research, especially in light of their tendency to select opposite sex SOs among this group.

While there are differences in the sources of influence for occupation between males and females, when we turn to educational others the patterns of influence are remarkably similar. (The rank order correlation for frequency is .894 while for occupation the coefficient was .730). The sex linked pattern in the choice of SOs that we observed in the case of occupation still holds, but to a lesser extent. For example, note that while fathers are more influential for males than for females and mothers slightly more important for females, the differences are not particularly large. And we note that, in a reversal of the case for occupational others, teachers are now more influential for males than for females, but these differences are very small. Finally, it is interesting to observe that there is little difference in the importance of peer friends between males and females. Apparently, males and females differ much more in their sources of influence for occupation than they do for education.

There is one further finding in Table 14 that requires some explanation. The table shows that the chi-square value for role relationship and number of SOs for males and females for education was not statistically significant. At the same time, this statistic based on the influence scores was significant. Since the influence scores is a function of the number of modes through which influence was transmitted and the number of others in a category, they are highly correlated with the frequency

measures. At the same time, however, the sample size for the influence scores is considerably larger. We need to know whether the higher chi-square value for the influence index reflected simply the larger sample size or if it reflects differences in influence patterns between males and females. To do this we computed an adjusted value of chi-square. This new value was calculated by adjusting the observed values on the influence index to reflect the sample size based on frequency. Thus, the percentage of influence generated from each role relationship category remains the same, but the frequency values are altered to reflect the different base. The result is to eliminate the effect of the larger sample size on the chi-square value.[3] In this particular case, the adjusted chi-square value for the influence scores is less than the actual value, but larger than was the case for the frequency scores. We conclude then that there is a significant difference in influence patterns between males and females based on the influence index. This technique will be used in subsequent analysis whenever the chi-square value for frequency is not significant, but for influence it is.

The data in Table 14 can also be used to compare the pattern of occupational and educational influence by role for males and females separately. For both males and females there are significant differences in influence patterns between occupation and education. As one might expect from the previous analysis, however, the differences are stronger for males than for females. For example, for males, fathers are less important for education than for occupation while mothers are slightly

more important for education. In the case of female students, both parents provide slightly less influence for education than they do for occupation and the difference between mother and father is much smaller than it is for males. It is also very apparent that males are more likely to choose opposite sex SOs for education compared to occupation than are females. And again, one should note the two different patterns for teachers: for males, they are more important as educational others, while for females they are more important as occupational others.

Now that it has been established that there are different patterns of influence for occupation and education and for males and females, it is worthwhile to examine the effects of a number of other variables on the sources of information. In the following sections we will look at the effects of year in school, family SES, residence, extracurricular activities and aspiration level on sources of influence. In each case we want to know whether students in different categories of these variables choose different significant others.

1. Year in school

The probability data presented earlier suggested that year in school would have an effect on the sources of information for occupation and education. The data presented in Table 15 confirm this. Perhaps the most obvious and important finding in this table is that as a student progresses through school, parents become less important as sources of information and peers more important. For example, for freshman and sophomore students, parents constitute 32.7 percent of all others for

Table 15. Relationship of occupational and educational significant others to the subject by year in school for frequency, influence index and percent mention.

Relationship of other to student	Type of other	Frequency (%) Freshman/ sophomore	Frequency (%) Junior/ senior	Influence index (%) Freshman/ sophomore	Influence index (%) Junior/ senior	Percent mention Freshman/ sophomore	Percent mention Junior/ senior
Father	Occ	18.3	14.2	25.8	17.6	80.0	88.7
	Educ	14.2	10.4	19.6	12.1	63.8	67.7
Mother	Occ	14.4	9.7	15.6	11.6	62.5	61.3
	Educ	13.4	11.4	16.5	13.5	60.0	74.2
Brother	Occ	5.0	5.2	4.1	5.0	18.8	25.8
	Educ	8.1	5.8	8.4	6.7	31.3	32.2
Sister	Occ	4.4	3.2	3.7	3.3	16.3	19.4
	Educ	6.4	5.6	6.9	5.9	23.8	35.5
Other relative	Occ	13.3	7.0	12.1	7.9	37.5	29.0
	Educ	16.8	10.6	14.5	8.4	38.8	40.3
Peer friend - same sex	Occ	21.3	31.7	19.5	28.6	50.0	70.0
	Educ	23.7	30.0	20.6	27.9	51.3	75.8
Peer friend - opposite sex	Occ	2.2	3.5	1.8	2.8	7.5	16.1
	Educ	5.0	9.9	4.3	9.6	18.8	33.9
Teacher	Occ	7.2	13.2	6.2	12.7	27.5	53.2
	Educ	8.9	10.9	6.5	10.1	27.5	51.6
Adult friend	Occ	8.6	7.7	7.0	7.2	23.8	33.9
	Educ	2.8	3.6	2.4	4.4	10.0	
Employer	Occ	1.4	2.7	1.0	2.0	6.3	12.9
	Educ	0.0	0.2	0.0	0.2	0.0	1.6
Unspecified	Occ	3.9	1.7	3.1	1.1	----	----
	Educ	0.5	1.4	0.4	1.2	----	----
Totals	Occ	361	401	512	636		
	Educ	358	413	491	594		
	Occupation:	$X^2 = 30.83$, $p < .05$ $v_2 = .204$		$X^2 = 43.29$, $p < .05$ $v_2 = .196$			
	Education:	$X^2 = 20.75$, $p < .05$ $v = .165$		$X^2 = 45.68$, $p < .05$ $v = .206$			

occupation while peers total 23.5 percent. For juniors and seniors, these figures are 23.9 percent and 35.2 percent respectively. The figures are roughly parallel for educational others. The tendency for older youths to become more age mate oriented is not surprising. Recent literature suggests that even though peers become more influential, this does not imply a rejection of parental values (see e.g., L. Larson, 1971; McDill and Rigsby, 1975).

The other notable finding for both occupational and educational SOs is the increase in influence of teachers. While this increase is larger in the case of occupation, the percentage of students who mention a teacher as an SO when they are a junior or senior is double that of students who are younger in the case of both occupation and education. The overall conclusion that can be drawn from this data is that as students become older, the sources of influence are increasingly located outside of the family.

Although the proportions of males and females are virtually identical for both age groups, nevertheless, it appears that males and females alter their sources of information in different ways as they progress through school. The data for occupational and educational sources of influence by year and sex is presented in Tables 16 and 17.

In the case of occupational others, parents become relatively less important for both sexes as the student gets older. This trend, however, is stronger for females, especially in the case of maternal influence. Although parental net influence declines for females, this is primarily a consequence of that fact that a larger number of agents of influence are

Table 16. Relationship of occupational significant others to student by year and school and sex for frequency, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency		Influence Index		Percent Mention	
		Freshman/ Sophomore	Junior/ Senior	Freshman/ Sophomore	Junior/ Senior	Freshman/ Sophomore	Junior/ Senior
Father	M	19.4	17.9	30.7	20.1	90.9	91.2
	F	16.8	11.3	19.0	12.9	66.7	85.7
Mother	M	12.1	8.4	11.1	9.5	56.8	41.2
	F	17.4	10.8	21.8	13.2	69.4	85.7
Brother	M	6.8	11.5	5.4	4.0	25.0	17.6
	F	3.9	6.3	2.3	5.8	11.1	35.7
Sister	M	1.9	1.7	1.4	1.5	6.8	5.9
	F	7.7	4.5	6.9	4.7	27.8	35.7
Other relative	M	12.6	3.9	12.2	4.0	36.4	14.7
	F	14.2	9.4	12.0	10.7	38.9	46.4
Peer friend same sex	M	23.3	35.8	18.6	31.1	56.8	70.6
	F	18.7	28.4	20.8	26.7	41.7	89.3
Peer friend opposite sex	M	1.9	2.2	1.7	1.5	6.8	8.8
	F	2.6	4.5	1.8	3.8	8.3	25.0
Teacher	M	4.4	10.0	4.4	10.3	15.9	35.3
	F	11.0	15.8	8.8	14.6	41.7	75.0
Adult friend	M	11.7	8.9	9.8	8.8	31.8	32.4
	F	4.5	6.8	3.2	6.1	13.9	35.7
Employer	M	1.4	3.9	1.0	3.3	6.8	17.6
	F	1.3	1.8	0.9	1.1	5.6	7.1
Unspecified	M	4.4	3.4	3.7	2.2	---	---
	F	3.2	0.4	2.3	0.2	---	---
TOTAL	M	206	179	296	273		
	F	155	222	216	363		
MALES:		$x^2 = 23.83$, $p < .05$ $v = .254$		$x^2 = 38.09$, $p < .05$ $v = .265$			
FEMALES		$x^2 = 17.97$, $p < .05$ $v = .220$		$x^2 = 23.94$, $p < .05$ $v = .204$			

Table 17. Relationship of educational significant others to the subject by year in school and sex of student for frequency, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Freshman/ sophomore	Frequency (%) Junior/ senior	Influence Index (%) Freshman/ sophomore	Influence Index (%) Junior/ senior	Percent mention Freshman/ sophomore	Percent mention Junior/ senior
Father	M	17.4	11.7	26.1	14.2	68.2	61.8
	F	11.3	9.4	13.8	10.6	58.3	75.0
Mother	M	11.6	12.2	14.8	14.6	45.5	61.8
	F	15.1	10.7	18.0	12.6	77.8	89.3
Brother	M	9.3	5.6	9.2	5.9	29.5	23.5
	F	7.0	6.0	7.7	7.4	33.3	42.9
Sister	M	6.4	4.4	5.7	4.3	20.5	23.5
	F	6.4	6.4	8.0	7.0	27.8	50.0
Other relative	M	14.0	7.8	10.9	6.3	36.4	29.4
	F	19.4	12.9	17.6	10.0	41.7	53.6
Peer friend - same sex	M	25.0	28.9	20.5	25.6	52.3	67.6
	F	22.6	30.9	20.7	29.7	50.0	85.7
Peer friend - opposite sex	M	4.7	8.3	3.5	8.3	15.9	23.5
	F	5.4	11.2	5.0	10.6	22.2	46.4
Teacher	M	7.0	15.0	5.2	13.8	22	52.9
	F	10.8	7.7	7.7	7.4	33.3	50.0
Adult friend	M	4.6	3.9	3.9	5.1	13.6	17.6
	F	1.1	3.4	0.8	3.8	5.6	21.4
Employer	M	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.4	0.0	0.3	0.0	3.6
Unspecified	M	0.0	2.2	0.0	2.0	----	----
	F	1.1	0.8	0.8	0.6	----	----
Total	M	172	180	230	254		
	F	186	233	261	340		
	Males:	$X^2 = 14.95$, $p < .20$		$X^2 = 28.93$, $p < .05$			
		$v = .207$		$v = .246$			
				$X^2_{adj} = 21.53$, $p < .05$			
	Females:	$X^2 = 15.70$, $p < .10$		$X^2 = 26.57$, $p < .05$			
		$v = .194$		$v = .211$			
				$X^2_{adj} = 19.11$, $p < .05$			

listed in all the other categories, for the percent of female students mentioning parents actually increases. On the other hand, net parental influence shows a much smaller decline for males, while the percent of males mentioning father remains the same and actually drops for those who mention mother as a significant other. The next thing to note is that both males and females show a decline in the influence of siblings and other relatives, but the decline for males is sharper. Finally, it is interesting to observe that both sexes show an increase in the influence of teachers, but that increase is larger for males. One of the reasons for this is the particularly small role of teachers for freshman and sophomore males students. But note that about three fourths of the older female students list a teacher as an other while only about one third of the male students do so. The most likely reason for this is the increased importance of teachers as role models for female students.

In the case of educational significant others, we first note that the chi-square value for frequency is not significant but the value for the influence index is. Accordingly, we will focus on this measure. Again we note that parental influence declines for both sexes as the student gets older, but here the sharpest decline is in the influence of fathers of male students. Observe also that the percentage of male students mentioning a father also declines as the student gets older. With respect to the role of peers, their influence increases for both sexes, but the increase is larger for females. The most interesting finding here is that of the role of teacher whose influence for males increases

sharply, but remains about the same for females. This finding appears to be consistent with our earlier explanation of sex differences in that male upperclassmen are seeking more information about educational paths to already narrowed vocational goals, and one source of this information is presumably well informed adults.

2. Socio-economic status

Persons from high SES families typically have higher aspirations than those from low SES backgrounds. A dominant reason for this is a combination of higher parental expectations and greater family communication regarding education and occupation. Given this, one would expect high SES students to have more SOs and that their sources of information would be different than for students from lower SES backgrounds. The data presented earlier on number of SOs generally confirmed this, although for occupation the relationship was curvilinear, and for education, the differences were not significant. With respect to the sources of influence, the data in Table 18 suggests that high status youth do choose different significant others than do middle or low status youth. The differences across status levels, however, are not particularly strong and are somewhat difficult to interpret.

In examining the data, it appears that the amount of relative influence from within the family tends to decline as SES increases. While these declines are stronger for occupation than education, in both cases it is restricted to siblings and other relatives. Part of this is no doubt due to the inverse relationship between SES and family size, but the percent mention column also shows that those from higher status

Table 18. Relationship of occupational and educational significant others to subject by family socioeconomic status for frequency, influence index and percent mention.

Relationship of other to student	Type of other	Frequency (%) Low SES	Frequency (%) Medium SES	Frequency (%) High SES	Influence Index (%) Low SES	Influence Index (%) Medium SES	Influence Index (%) High SES	Percent Mention Low SES	Percent Mention Medium SES	Percent Mention High SES
Father	Occ	5.7	19.21	14.2	20.1	24.3	20.2	80.8	83.7	86.0
	Educ	9.7	13.4	13.5	11.9	15.2	18.9	51.1	69.8	76.0
Mother	Occ	12.1	12.1	11.3	15.6	11.1	12.6	59.6	53.5	72.0
	Educ	13.3	12.1	11.1	17.2	14.6	12.5	68.1	65.1	66.0
Brother	Occ	6.9	3.5	4.8	6.6	3.5	3.8	34.0	14.0	18.0
	Educ	9.7	6.0	5.2	9.8	7.1	5.9	51.1	20.9	24.0
Sister	Occ	4.4	3.5	3.5	3.7	2.8	3.8	19.2	14.0	20.0
	Educ	7.7	4.7	5.5	8.0	3.7	7.1	36.2	23.3	28.0
Other Relative	Occ	14.9	8.1	7.4	13.7	9.0	7.2	48.9	27.9	26.0
	Educ	14.5	15.1	11.4	12.2	13.0	9.0	48.9	37.2	34.0
Peer friend same sex	Occ	23.0	22.7	32.6	21.6	19.8	30.2	59.6	53.5	74.0
	Educ	28.2	23.7	29.1	24.6	20.8	27.6	61.7	55.8	70.0
Peer friend opposite sex	Occ	1.6	1.5	4.8	1.3	1.4	3.8	8.5	7.0	18.0
	Educ	6.5	8.2	8.3	6.5	8.1	7.1	19.2	23.3	34.0
Teacher	Occ	7.7	13.6	10.3	5.5	14.6	10.0	29.8	44.2	42.0
	Educ	6.5	12.5	11.1	5.0	12.4	8.3	25.5	46.5	44.0
Adult friend	Occ	8.5	9.1	7.4	7.7	8.7	6.0	23.4	27.9	34.0
	Educ	3.2	3.4	3.1	3.9	4.3	2.6	10.6	16.3	16.0
Employer	Occ	2.0	4.0	1.0	1.6	3.1	0.6	8.5	14.0	6.0
	Educ	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	2.0
Unspecified	Occ	3.2	2.6	2.6	2.6	1.7	1.7	---	---	---
	Educ	0.8	0.9	1.4	0.9	0.6	0.9	---	---	---
Totals	Occ	248	198	310	379	288	470			
	Educ	248	232	289	337	322	424			
Occupation:		X^2= 36.36, p <.05 v=.157			X^2= 58.97, p< .05 v=.163					
Education:		X^2= 18.96, p < .50 v=.112			X^2= 39.02, p < .05 v=.135 X^2 adj= 30.88, p < .05					

families are also less likely to mention a sibling or other relative than are those from lower status families. In the case of parents, the net influence stays about the same across status levels. It is well to keep in mind though that the influence of high status parents may have been operating over a long period of time with respect to occupation and education. Longitudinal research would be particularly valuable in assessing parents role as a source of influence and how it varies by socio-economic status.

In examining the position of parents it is worthwhile to distinguish between mother and father and to look at occupation and education separately. In the case of fathers, their relative influence for occupation remains about the same across status levels, while for education their influence clearly increases. On the other hand, the relative influence of mothers for education declines, but for occupation it stays constant across SES levels. Nevertheless, the percent of students who mention mother as a significant other for occupation increases sharply from low to high status level, while it stays constant for education.

The finding of mothers having more influence than fathers for education for lower SES students and fathers being dominant for higher status students also occurred in the study by Larson (1971). Although Larson asked respondents to name the most influential person for their school work, our findings with respect to parents and SES parallel his. However, his reasoning that this occurs because students are more likely to look up to those persons who are most successful and thus more knowledgeable is suspect in light of our findings on occupational others. In the

case of occupational influence, fathers were as likely to be influential at low SES levels as they were at higher levels. In fact, our probability data shows that low SES fathers are much more likely to be occupationally specific others (.415) than are high SES fathers (.188). Thus, low SES fathers apparently serve as models and definers for occupation, but they are less likely to do so for education where mothers become much more important. Apparently, the factors of success and credibility mean different things in the occupational and educational realms. The factors influencing mothers and fathers relative influence clearly require more research.

The other findings of interest in Table 18 have to do with peer friends and teachers. In the case of peers, their influence on occupation increases substantially, while for education it stays constant across status levels. But note that peer influence on educational aspirations for low status students is much greater for education than for occupation. Apparently, occupational plans are not discussed as much as are educational aspirations among lower status youth. Finally, with respect to teachers, their relative influence increases as SES increases, as might be expected.

When comparing the overall pattern of sources of influence for occupation and education at each SES level, there is one other finding of note. At the low and medium SES levels, there were significant differences between the sources of influence for occupation and education and these differences generally paralleled those of the entire sample reported earlier. On the other hand, there were no significant

differences between the sources of information for occupation and education at the highest status levels. In fact, with some minor exceptions, the relative influence from each role category was remarkably similar for occupation and education.

Since there were a disproportionate number of males and female students in each SES category, we examined the sources of influence by SES controlling for sex in the hope that it would clarify the patterns discussed above. The data, presented in Tables 19 and 20, show that there is a significant relationship between sources of influence and SES for occupation for male students, but not for females. And, in the case of educational SOs, the opposite holds: the relationship is significant for females but not for males. This is particularly interesting in light of the Woelfel (1972) data which showed no significant variation in occupational others by SES. As discussed above, this finding applied to the whole sample which had a very high proportion of female students. Furthermore, by controlling for sex, the infleunce patterns found for the entire sample across SES levels are indeed clarified. For example, the relatively constant influence of fathers across SES levels is largely a result of a decline in fathers influence for males and an increase in their influence for females. This is particularly clear in the percent mention column where fathers are mentioned by 100 percent of the low status male students. This column also shows that the percent of female students mentioning mother as a source of information for occupation increases sharply as SES increases, while the percent for males stays about the same. Beyond this, the

Table 19. Relationship of occupational significant others to subject by family socioeconomic status and sex of subject for frequency of mention, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Low SES	Frequency (%) Medium SES	Frequency (%) High SES	Influence Index (%) Low SES	Influence Index (%) Medium SES	Influence Index (%) High SES	Percent Mention Low SES	Percent Mention Medium SES	Percent Mention High SES
Father	M	19.7	20.2	16.4	26.9	28.6	27.3	100.0	85.7	85.7
	F	10.4	18.3	12.2	11.7	19.9	14.6	52.6	81.8	86.4
Mother	M	11.3	8.5	11.0	12.0	6.8	11.5	53.6	38.1	5.71
	F	13.2	15.4	11.6	19.9	15.6	13.4	68.4	68.21	90.9
Brother	M	8.5	3.2	4.1	8.2	2.0	3.3	39.3	9.5	14.3
	F	4.7	3.8	5.5	4.7	5.0	4.2	26.3	18.2	22.7
Sister	M	2.1	2.1	1.4	1.4	1.4	1.4	7.1	9.5	3.6
	F	7.5	4.8	5.5	6.4	4.3	5.7	36.8	18.2	40.9
Other relative	M	14.8	7.4	3.4	13.0	8.8	3.3	42.9	19.1	17.9
	F	15.1	8.7	11.0	14.6	9.2	10.3	57.9	36.4	36.4
Peer friend same sex	M	21.8	29.8	35.6	19.7	23.1	30.6	57.1	66.7	64.3
	F	24.5	16.3	29.9	24.0	16.3	29.9	63.2	40.9	86.4
Peer friend opposite sex	M	0.7	1.1	4.1	0.5	0.7	3.3	3.6	4.8	14.3
	F	2.8	1.9	5.5	2.3	2.1	4.2	15.8	9.1	22.7
Teacher	M	2.8	10.6	8.2	2.4	12.2	7.2	14.3	33.3	25.0
	F	14.2	16.3	12.2	9.4	17.01	12.3	52.6	54.6	63.6
Adult friend	M	9.2	10.6	11.6	8.2	11.6	9.1	25.0	28.6	42.9
	F	7.5	7.7	3.7	7.0	5.7	3.4	21.1	27.3	22.7
Employer	M	3.5	3.2	1.4	2.9	2.7	1.0	14.3	14.3	7.1
	F	0.0	4.8	0.6	0.0	3.5	0.4	0.0	13.6	4.6
Unspecified	M	5.6	3.2	2.7	4.8	2.0	1.9	---	---	---
	F	0.0	1.9	2.4	0.0	1.4	1.5	---	---	---
Totals	M	142	94	146	208	147	209			
	F	106	104	164	171	141	261			
Males:		X^2= 33.01, p < .05 v=.212			X^2= 48.97, p < .05 v=.214					
Females:		X^2= 26.35, p < .10 v=.189			X^2= 35.74, p < .05 v=.178 X^2_{adj}= 23.15, p < .20					

Table 20. Relationship of educational others to subject by family socioeconomic status and sex of subject for frequency of mention, influence index and percent mention

Relationship of other to student	Sex of student	Frequency (%) Low SES	Frequency (%) Medium SES	Frequency (%) High SES	Influence Index (%) Low SES	Influence Index (%) Medium SES	Influence Index (%) High SES	Percent Mention Low SES	Percent Mention Medium SES	Percent Mention High SES
Father	M	11.6	16.2	16.1	15.8	18.1	25.1	53.6	76.2	71.4
	F	7.6	11.3	11.5	8.1	12.9	14.5	47.4	63.6	81.8
Mother	M	13.2	12.1	10.5	17.6	14.6	12.0	57.1	57.1	46.4
	F	13.4	12.0	11.5	16.9	14.6	12.9	84.2	72.7	90.9
Brother	M	10.9	7.1	4.0	10.9	8.3	3.4	50.0	14.3	14.3
	F	8.4	5.3	6.1	8.7	6.2	7.6	52.6	27.3	36.4
Sister	M	7.8	3.0	4.8	7.3	2.1	5.1	28.6	14.3	21.4
	F	7.6	6.0	6.1	8.7	5.1	8.4	47.4	31.8	36.4
Other relative	M	11.6	9.1	11.3	9.1	8.3	8.0	39.3	33.3	28.6
	F	17.6	19.5	11.5	15.1	16.9	9.6	63.2	40.9	40.9
Peer friend same sex	M	27.9	27.3	25.8	24.2	20.8	24.0	64.3	52.4	60.7
	F	28.6	21.1	31.5	25.0	20.8	30.1	57.9	59.1	81.8
Peer friend opposite sex	M	5.4	5.1	8.9	5.5	4.9	7.4	14.3	19.1	25.0
	F	7.6	10.5	7.9	7.6	10.7	6.8	26.3	27.3	45.5
Teacher	M	8.5	13.1	12.1	6.7	13.9	9.1	28.6	42.9	39.3
	F	4.2	12.0	10.3	3.5	11.2	7.6	21.1	50.0	50.0
Adult friend	M	1.6	6.1	5.6	1.2	8.3	5.1	3.6	23.8	21.4
	F	5.0	1.5	1.2	6.4	1.1	0.8	21.1	9.1	9.1
Employer	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.6	0.0	0.0	0.4	0.0	0.0	4.6
Unspecified	M	1.6	1.0	0.8	1.8	0.7	0.6	---	---	---
	F	0.0	0.8	1.8	0.0	0.6	1.2	---	---	---
Total	M	129	99	124	165	144	175			
	F	119	133	165	172	178	249			
Males:		X^2= 14.86, p <.70 v=.146			X^2= 30.82, p <.05 v=.179					
Females:		X^2= 20.97, p <.30 v=.159			X^2= 40.48, p <.05 v=.184 X^2adj= 40.57, p<.05					

the differences across status levels discussed above - particularly the decline in sibling and other relative influence and the increases for peers and teachers - is largely confined to males.

When the sources of educational influence for males and females are considered some other interesting findings emerge. First, it is worthy of note that the pattern of fathers influence increasing and mothers decreasing as SES increases holds with about equal strength for both males and females. There is an interesting variation here, however. Low status males get about equal influence from each parent, while at the higher status levels, fathers are much more influential. On the other hand, mothers are much more influential than fathers for low status females, while at higher SES levels, the relative influence is about the same. The other finding of note is that the increasing influence of teachers is much stronger for females than it is for males, which is just the opposite of what happens for occupational influence.

3. Residence

Even though this data was taken from a sample that could be described as rural, we thought it valuable to see whether different residential locations (on the farm, or in town) would have any impact on the sources of influence. The data, presented in Table 21, shows that it does. The differences are much stronger, however, for occupation than they are for education.

In examining the sources of influence for both occupation and education, there is an apparent tendency for those who live on a farm to

Table 21. Relationship of occupational and educational significant others to subject by residence for frequency, influence index and percent mention.

Relationship of other to student	Type of other	Frequency (%)		Influence Index (%)		Percent mention (%)	
		Farm	Town	Farm	Town	Farm	Town
Father	Occ	17.9	16.6	20.9	22.7	93.9	77.2
	Educ	10.7	13.1	13.8	16.7	54.6	67.3
Mother	Occ	12.3	11.8	15.4	12.7	66.7	58.4
	Educ	13.6	12.1	16.2	14.5	72.7	63.4
Brother	Occ	6.7	4.4	6.2	4.0	33.3	17.8
	Educ	10.2	5.7	8.8	7.1	54.6	22.8
Sister	Occ	4.5	3.1	4.8	2.6	21.2	13.9
	Educ	7.3	4.7	9.2	4.1	39.4	22.8
Other relative	Occ	13.4	7.5	13.6	7.2	42.4	29.7
	Educ	13.6	13.1	11.2	10.8	45.5	34.7
Peer friend same sex	Occ	16.2	30.8	15.0	27.9	57.6	64.6
	Educ	22.0	29.2	18.8	26.5	57.6	65.4
Peer friend opposite sex	Occ	2.2	3.1	1.8	2.6	12.1	10.9
	Educ	7.9	8.3	7.7	7.5	27.3	25.7
Teacher	Occ	7.8	11.6	6.6	11.3	36.4	39.6
	Educ	8.5	10.0	6.5	9.0	33.3	38.6
Adult friend	Occ	12.8	6.4	11.4	5.8	33.3	25.7
	Educ	5.1	2.8	6.5	2.7	18.2	12.9
Employer	Occ	2.2	2.3	1.8	1.7	9.1	9.0
	Educ	0.0	0.8	0.0	0.1	0.0	1.0
Unspecified	Occ	3.9	2.3	2.6	1.8	---	---
	Educ	1.1	0.8	1.2	0.5	---	---
Totals	Occ	179	517	273	781		
	Educ	177	528	260	731		
Occupation:		$x^2=26.93$; $p<.05$ $v=.199$		$x^2=43.63$, $p<.05$ $v=.206$			
Education:		$x^2=11.56$, $p<.05$ $v=.129$		$x^2=25.44$, $p<.05$ $v=.161$ $x^2adj=17.73$; $p<.05$			

receive more information from within the family compared to those who live in town. As was the case with SES, however, most of this difference is due to lesser relative influence from siblings which is probably due to the larger family size of those who live on farms. Nevertheless, even though the amount of parental influence is fairly constant between town and farm, the percent of students mentioning each parent as a SO is generally lower for those who live in town than for those living on a farm. Of particular interest is the significant difference between the percent of farm students who mention a father as an occupational other and the percent of students living in town who do so.

This pattern can be seen more clearly when we look at the probability of being a specific kind of other for selected role relationship categories. As the data in Table 22 clearly shows, farm fathers are about equally likely to be occupational others only as they are to be others of both types (.424 and .525). On the other hand, fathers of students who live in town are most likely to be both occupational and educational others (.697). In contrast, mothers of farm students are more likely to be SOs for both attitudes than are mothers of students living in town (.769 and .618). And, in the case of sisters and other relatives, we see a clear tendency for both these types to be an other for education only for students living in town and a decline in the liklihood that they are significant for both attitudes. What is most clearly highlighted here is fathers role as an occupational other for farm students plus the general tendency for other categories of SOs to be significant for both aspirations for farm students.

Table 22. Probability of a source of influence being a specific type of other by selected role relationship categories and residence.

Relationship to student	Residence	Type of Other: Occupational Only	Educational Only	Occupational & Educational	Number of Others
Father	Farm	.424	.030	.545	33
	Town	.236	.077	.697	89
Mother	Farm	.077	.154	.769	26
	Town	.171	.211	.618	76
Brother	Farm	.143	.429	.429	21
	Town	.189	.378	.432	37
Sister	Farm	.071	.429	.500	14
	Town	.242	.515	.242	33
Other relative	Farm	.333	.333	.333	36
	Town	.216	.557	.227	88
Peer friend same sex	Farm	.316	.491	.193	57
	Town	.401	.385	.214	257
Peer friend opposite sex	Farm	.067	.733	.200	15
	Town	.137	.686	.176	51
Teacher	Farm	.400	.440	.160	25
	Town	.430	.366	.204	93

The other findings of interest in Table 21 have to do with the position of peer friends and teachers. There is clearly a tendency for both of these agents to provide more information to students living in town than to those who reside on farms, although this is stronger for occupation than for education. The probability data also show the greater liklihood of peers and teachers being educational specific others for farm students. These findings are most likely due to the greater probability of interaction outside the family for those who live in town.

When we examine the relationship between residence and source of influence for occupation for males and females separately (Table 23), it is apparent that the effect of residence is much stronger for males. For example, parental influence (especially that of mothers) drops for males who live in town compared to those living on farms, while for females there is little change. The most noticeable differences between males and females, however, is in the increase of peer and teacher influence for those who live in town. These increases are much stronger for males.

In the case of educational sources of influence, there are also some differences between males and females as can be seen in Table 24. For example, the increase in influence for fathers and the decline for mothers for those who live in town occurs only for males. Similarly, the greater role of peers for town students is also stronger for males. In contrast, the increase in teachers influence occurs for females only. In fact, the relative influence of teachers for male students actually drops for those who live in town. It is important to realize, however, that these

Table 23. Relationship of occupational significant others to subject by sex of subject and residence for frequency, influence index and percent mention.

Relationship of other to student	Sex of Student	Frequency (%) Farm	Frequency (%) Town	Influence Index (%) Farm	Influence Index (%) Town	Percent Mention Farm	Percent Mention Town
Father	M	21.6	18.0	25.7	28.3	100.0	87.0
	F	13.4	15.2	16.1	16.6	83.3	74.5
Mother	M	13.4	9.0	14.7	8.8	57.1	44.4
	F	11.0	14.8	16.1	16.8	83.3	74.5
Brother	M	9.3	4.5	8.8	3.7	38.1	16.7
	F	3.7	4.4	3.6	4.3	25.0	19.2
Sister	M	0.0	1.5	0.0	1.2	0.0	5.6
	F	9.8	4.8	9.5	4.0	58.3	23.4
Other relative	M	12.4	6.7	13.2	5.9	33.3	24.1
	F	14.6	8.4	13.9	8.6	58.3	36.2
Peer friend - same sex	M	14.4	34.8	12.51	29.0	47.6	66.7
	F	18.3	26.4	17.5	26.7	75.0	61.7
Peer friend - opposite sex	M	1.0	2.6	0.7	2.0	4.8	9.3
	F	3.7	3.6	2.9	3.2	25.0	12.8
Teacher	M	4.1	8.6	3.7	8.8	19.1	27.8
	F	12.2	14.8	9.5	13.9	66.7	53.2
Adult friend	M	14.4	8.6	13.2	7.9	28.6	33.3
	F	11.0	4.0	9.5	3.5	41.7	17.0
Employer	M	4.1	2.2	3.7	1.7	14.3	11.1
	F	0.0	2.4	0.0	1.6	0.0	8.5
Unspecified	M	5.2	3.4	3.7	2.7	------	------
	F	2.4	1.2	1.5	0.8	------	------
Total	M	97	267	136	407		
	F	82	250	137	374		

Males: $X^2 = 25.18$ $p < .05$, $v = .268$ | $X^2 = 38.65$, $p < .05$, $v = .271$

Females: $X^2 = 15.06$, $p < .10$, $v = .215$ | $X^2 = 22.94$, $p < .05$, $v = .213$

$X^2_{adj} = 14.19$, $p < .20$

Table 24. Relationship of educational significant others to subject by sex of subject and residence for frequency of mention, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Farm	Frequency (%) Town	Influence Index (%) Farm	Influence Index (%) Town	Percent Mention Farm	Percent Mention Town
Father	M	10.6	15.9	15.7	21.3	47.6	72.2
	F	10.8	10.6	12.0	13.1	66.7	61.7
Mother	M	16.0	10.6	18.1	13.7	66.7	48.2
	F	10.8	13.4	14.3	15.2	83.3	80.9
Brother	M	12.8	5.7	11.8	6.1	57.1	16.7
	F	7.2	5.7	6.0	8.0	50.0	29.8
Sister	M	5.3	4.9	4.7	4.7	23.8	20.4
	F	9.6	4.6	13.5	3.6	66.7	25.5
Other relative	M	10.6	10.6	9.4	7.6	33.3	31.5
	F	16.9	15.2	12.8	13.6	66.7	38.3
Peer friend - same sex	M	18.1	30.6	15.0	26.3	52.4	63.0
	F	26.5	27.9	22.6	26.7	66.7	68.1
Peer friend - opposite sex	M	6.4	6.9	6.3	6.1	19.1	20.4
	F	9.6	9.5	9.0	8.7	41.7	31.9
Teacher	M	13.8	9.8	11.0	9.1	42.9	33.3
	F	2.4	10.2	2.3	9.0	16.7	44.7
Adult friend	M	4.3	4.1	5.5	4.4	14.3	14.8
	F	6.0	1.8	7.5	1.3	25.0	10.6
Employer	M	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.7	0.0	0.3	0.0	2.1
Unspecified	M	2.1	0.8	2.4	0.6	------	----
	F	0.0	0.7	0.0	0.5	------	----
Total	M	94	245	127	342		
	F	83	283	133	389		

Males: $X^2 = 12.38$, $p < .20$; $v = .192$ — $X^2 = 13.76$, $p < .20$; $v = .166$

Females: $X^2 = 12.76$, $p << .20$; $v = .187$ — $X^2 = 37.18$, $p < .05$; $v = .267$; $X^2_{adj} = 25.63$, $p < .05$

differences in the sources of educational influence are rather small.

While these findings are interesting, a great deal of caution is warranted due to the small size of the farm sample and because of the fact that the entire sample is a rural one. Nevertheless, the fact that we have found significant differences in the sources of influence by residential location within a rural area warrants more research on rural-urban differences.

4. Extracurricular Activities

In recent years, social scientists have come to pay more attention to the relationship between extracurricular activities and aspiration and attainment (see e.g., Spady, 1970, 1971; Hanks and Eckland, 1976). Given the importance of this variable, it is worthwhile to examine the sources of influence for occupational and educational aspirations by level of activity. Since participation in extracurricular activities by its very nature involves larger amounts of interaction with peers and teachers, it is to be expected that the relative influence for these two role relationship categories will increase with activity level. At the same time, relative parental influence should decline as activity level increases. As the data in Table 25 shows, this is indeed the case. At the same time that relative influence declines, the percentage of students who mention a parent as an other actually increases and thus the decline is one of relative influence. What clearly occurs here is a greater level of involvement with all others, but since a student has only two parents while they have multiple friends and teachers, the relative influence of parents

Table 25. Relationship of occupational and educational significant others to subject by level of extracurricular activities (Act) for frequency of mention, influence index and percent mention.

Relationship of other to student	Type of other	Frequency (%) Low Act.	Medium Act.	High Act.	Influence Index (%) Low Act.	Medium Act.	High Act.	Percent Mention Low Act.	Medium Act.	High Act.
Father	Occ	20.2	16.2	12.6	27.7	21.5	16.0	74.1	89.8	89.7
	Educ	16.4	12.6	8.7	19.8	17.5	10.2	59.3	69.51	69.0
Mother	Occ	13.8	11.9	9.8	13.1	14.1	12.0	50.0	69.5	69.0
	Educ	13.3	12.9	10.3	15.4	16.1	12.2	48.1	74.6	82.8
Brother	Occ	4.9	5.5	4.7	4.2	4.8	4.7	13.0	27.1	27.6
	Educ	8.2	6.9	5.8	8.7	8.1	5.7	22.2	35.6	41.4
Sister	Occ	3.9	4.3	2.8	3.5	4.1	2.6	11.1	22.0	20.7
	Educ	8.7	5.4	4.5	9.5	5.2	5.7	27.8	28.8	31.0
Other relative	Occ	9.4	10.1	10.3	9.0	9.3	11.1	27.8	37.3	37.9
	Educ	14.4	12.3	14.5	11.8	10.0	12.2	35.2	37.3	51.7
Peer friend sam sex	Occ	23.6	26.7	30.0	20.4	25.0	27.4	46.3	67.8	82.8
	Educ	23.1	29.3	27.3	20.2	25.5	26.6	51.9	62.7	79.3
Peer friend opposite sex	Occ	0.5	3.8	3.7	0.3	2.9	3.2	1.9	16.9	17.2
	Educ	2.6	9.6	9.1	2.0	8.8	8.8	7.4	35.6	37.9
Teacher	Occ	6.9	9.3	15.4	6.9	8.3	14.6	18.5	42.4	69.0
	Educ	7.7	7.8	14.9	6.7	6.2	12.7	25.9	30.5	75.9
Adult friend	Occ	9.9	7.8	7.0	9.7	6.4	7.0	25.9	27.1	34.5
	Educ	5.1	2.4	2.9	5.5	1.9	4.2	14.8	11.9	17.2
Employer	Occ	3.4	1.4	1.9	2.8	1.1	1.2	13.0	6.8	6.9
	Educ	0.0	0.3	0.0	0.0	0.2	0.0	0.0	1.7	0.0
Unspecified	Occ	3.4	2.9	1.9	2.4	2.3	1.2	---	---	---
	Educ	0.5	0.6	2.1	0.4	0.4	1.7	---	---	---
Totals	Occ	203	345	214	289	516	343			
	Educ	195	334	242	253	479	353			
Occupation:		X^2= 24.87, p < .20 v=.130			X^2= 40.59, p < .05 v=.134					
Education:		X^2= 34.69. p < .05 v=.151			X^2_{adj}=27.56, p < .10 X^2= 56.14, p < .05 v=.162					

declines. This pattern of findings is so clear as to warrant little further discussion.

Since there is a clear difference between males and females in participation in extracurricular activities (females are significantly higher), it is useful to look at the relationship between activity level and sources of information controlling for the sex of the student. The data presented in Table 26 shows that the relationship between activity level and source of influence for occupation is stronger for females than it is for males. In fact, the changes in the relative influence by activity level are markedly different for males and females. For example, the decline in parental influence noted above holds only for females. But it is particularly clear that this represents a decline in relative influence, since the precent of females mentioning either parent as an other increases substantially.

The most interesting difference between the sexes is the low relative influence of peers for female students at the lowest activity level compared with that of males in the same category. This is paralleled by the fact that only 27.8% of the females mention a same sex peer as an other as opposed to about one half of the males at the same activity level. Apparently, lack of participation in activities does not diminish the contact males have with peers regarding occupation, but it certainly does for females.

In addition to the increase in peer influence, there is an equally dramatic increase in the influence of teachers for females. This is most clearly evidenced in the percent mention data. And finally, it is interesting to observe that the influence of adult friends and employers increases for for females and declines for males as activity level increases. In short,

Table 26. Relationship of occupational significant others to subject by level of extracurricular activity and sex of subject for frequency, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Low Act.	Frequency (%) Medium Act.	Frequency (%) High Act.	Influence Index (%) Low Act.	Influence Index (%) Medium Act.	Influence Index (%) High Act.	Percent Mention Low Act.	Percent Mention Medium Act.	Percent Mention High Act.
Father	M	20.0	17.2	20.0	28.6	28.8	26.7	86.1	96.8	90.9
	F	20.8	15.1	10.4	24.6	15.7	13.0	50.0	82.1	88.9
Mother	M	10.3	10.6	10.0	8.5	11.5	14.7	44.4	61.3	36.4
	F	25.0	13.3	9.8	27.5	18.2	11.2	61.1	78.6	88.9
Brother	M	6.4	5.0	4.0	5.4	4.3	5.3	19.4	25.8	18.2
	F	0.0	6.1	4.9	0.0	5.8	4.5	0.0	28.6	33.3
Sister	M	2.6	1.7	0.0	2.3	1.2	0.0	8.3	6.5	0.0
	F	8.3	7.3	3.6	7.2	7.4	3.4	16.7	39.3	33.3
Other relative	M	9.0	8.9	6.0	9.1	8.3	8.0	27.8	29.0	18.2
	F	10.4	11.5	11.6	8.7	11.2	11.9	27.8	46.4	50.0
Peer friend same sex	M	25.8	30.0	36.0	20.9	29.2	26.7	55.6	67.7	72.7
	F	16.7	23.0	28.0	14.5	22.7	27.6	27.8	67.9	88.9
Peer friend opposite sex	M	0.6	3.3	2.0	0.5	2.8	1.3	2.8	12.9	9.1
	F	0.0	4.2	4.3	0.0	3.3	3.7	0.0	21.4	22.2
Teacher	M	5.8	7.2	10.0	6.8	7.5	9.3	13.9	32.3	36.4
	F	10.4	11.5	17.0	7.2	9.9	16.0	27.8	53.6	88.9
Adult friend	M	11.6	10.0	8.0	10.0	9.1	5.3	36.1	32.3	18.2
	F	4.2	5.4	6.7	2.9	4.1	6.3	5.6	21.4	44.4
Employer	M	4.5	1.7	0.0	3.6	1.6	0.0	19.4	6.5	0.0
	F	0.0	1.2	2.4	0.0	0.8	1.5	0.0	7.1	11.1
Unspecified	M	3.2	4.4	4.0	2.3	4.0	2.7	---	---	---
	F	4.2	1.2	1.2	2.9	0.8	0.7	---	---	---
Total	M	155	180	50	220	253	75			
	F	48	165	164	69	242	268			
Males:		X^2= 12.72, p< .80 v=.131			X^2= 17.45, p< .50 v=.126					
Females:		X^2= 24.17, p< .20 v=.180			X^2= 40.20, p< .05 v=.188 X^2adj=26.38, p< .10					

the tendency to obtain information about occupation from outside of the family is particularly strong for females as involvement in extracurricular activities increases. For males, the changes in influence across activity levels are very small and involves primarily an increase in the role of peers.

In the case of educational significant others, there are again differences between males and females (Table 27), but this time the changes are greater for males across activity levels. The first thing to observe is the noticeable decline in fathers influence for males. While there are not many male students at the high activity level, it is still somewhat surprising that less than 55% of them mention a father as an educational SO. The situation of mothers is also of interest because they showed a sharp decline in relative influence for females, but a small increase in relative influence for male students. Additionally, we note a sharper decline in the influence of siblings and other relatives for males than for females.

In the case of peer friends, the increased relative influence of same sex peers is very small for both males and females, but that of opposite sex peers is quite large. As in the case of occupation, teachers show a different pattern for males and females, but in this case, the increased relative influence is much larger for males. And finally, as was the case with occupational others, the net influence of adult friends and employers declines for males, but increases for females. The general pattern here, in contrast to that for occupation, is a slightly stronger tendency for males to seek information from outside the family as activity level increases. The one exception, the increased influence of mothers for males, suggests that mothers' role as an educational other is quite important for male students

Table 27. Relationship of educational significant others to subject by level of extracurricular activity and sex of subject for frequency of mention, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Low Act.	Frequency (%) Medium Act.	Frequency (%) High Act.	Influence Index (%) Low Act.	Influence Index (%) Medium Act.	Influence Index (%) High Act.	Percent Mention Low Act.	Percent Mention Medium Act.	Percent Mention High Act.
Father	M	17.4	13.7	9.8	21.1	22.2	11.4	66.7	67.7	54.6
	F	14.0	11.6	8.2	16.4	13.7	9.8	44.4	71.4	77.8
Mother	M	10.9	12.4	13.1	12.8	15.7	15.9	41.7	61.3	63.6
	F	19.3	13.2	9.4	21.9	16.3	10.9	61.1	89.3	94.4
Brother	M	9.4	6.5	4.9	10.6	6.0	4.5	25.0	29.0	27.3
	F	5.3	7.2	6.1	4.1	9.9	6.0	16.7	42.9	50.0
Sister	M	8.0	4.6	1.6	8.9	3.2	1.1	27.8	19.4	9.1
	F	10.5	6.1	5.5	11.0	6.8	7.2	27.8	39.3	44.4
Other relative	M	14.5	9.2	6.6	11.7	6.5	6.8	38.9	29.0	27.3
	F	14.0	14.9	17.1	12.3	12.9	14.0	27.8	46.4	66.7
Peer friend same sex	M	22.5	32.7	23.0	18.3	28.2	20.4	55.6	61.3	63.6
	F	24.6	26.5	28.7	24.6	23.2	28.7	44.4	64.3	88.9
Peer friend opposite sex	M	3.6	6.5	13.1	2.8	6.5	11.4	11.1	25.8	27.3
	F	0.0	12.2	7.7	0.0	10.6	7.9	0.0	46.4	44.4
Teacher	M	7.2	10.4	21.3	7.2	8.3	19.3	25.0	25.5	72.7
	F	8.8	5.5	12.7	6.8	4.6	10.6	27.8	25.0	77.8
Adult friend	M	6.5	3.3	1.6	7.2	2.8	4.5	19.4	12.9	9.1
	F	1.8	1.6	3.3	1.4	1.1	4.2	5.6	10.7	22.2
Employer	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.0	0.0	0.0	0.4	0.0	0.0	3.6	0.0
Unspecified	M	0.0	0.6	4.9	0.0	0.5	4.5	---	---	---
	F	1.8	0.6	1.1	1.4	0.4	0.8	---	---	---
Total	M	138	153	61	180	216	88			
	F	57	181	181	73	263	265			
Males:		X^2= 30.13, p < .05 v=.208			X^2= 47.55, p < .05 v=.223					
Females:		X^2= 23.55, p < .20 v=.168			X^2= 36.31, p < .05 v=.174 X^2adj=26.54, p <.10					

who are more integrated into the school activity system.

5. Levels of Occupational and Educational Aspiration

While such variables as socioeconomic status, residence and extra-curricular activities are of interest, ultimately we are interested in whether high aspirers differ from low aspirers in their role relationships with significant others. As was pointed out above, the Woelfel data (1972) showed no significant differences between high, medium and low aspirers in terms of those they select as occupational significant others. It was suggested, however, that the result may have been a consequence of the fact that the sample had a very high percentage of females. The data presented here suggests that this was very likely the case. In this section we will first present the data for the combined sample of males and females on the relationship of significant others by level of aspiration. Table 28 presents this data for occupational others by level of occupational aspiration and for educational others by level of educational aspiration. Finally, the same data will be presented separately for male and female students.

As the data in Table 28 shows, there is a significant, but relatively weak relationship between level of aspiration and role relationship. In the case of occupational others, it is noted again that there is a tendency for influence from within the family to decrease as the aspiration level increases. The decline is particularly noticeable at the highest aspiration level. It is particularly interesting to observe that fathers' relative influence declines more so than does mothers', so that for high aspirers there is virtually no difference in the relative influence between the two. Concurrently, it is worth noting that while fathers are

Table 28. Relationship of occupational and educational significant others to subject by level of occupational and educational aspiration (ASP) for frequency of mention, influence index and percent mention.

Relationship of other to student	Type of other	Frequency (%) Low ASP	Frequency (%) Medium ASP	Frequency (%) High ASP	Influence Index (%) Low ASP	Influence Index (%) Medium ASP	Influence Index (%) High ASP	Percent Mention Low ASP	Percent Mention Medium ASP	Percent Mention High ASP
Father	Occ	19.0	15.6	13.3	26.2	18.5	18.2	83.3	80.0	88.1
	Educ	16.3	10.1	12.7	20.3	11.7	17.5	60.5	61.5	73.1
Mother	Occ	12.9	10.0	11.2	12.7	12.0	13.5	55.6	57.1	73.8
	Educ	15.6	11.4	11.4	17.7	14.9	13.1	57.9	69.2	69.2
Brother	Occ	5.2	7.5	3.6	4.8	6.9	3.3	20.4	31.4	19.1
	Educ	8.2	7.0	6.2	7.3	7.8	7.2	29.0	38.5	26.9
Sister	Occ	4.8	4.0	3.2	3.6	4.0	3.6	14.8	22.9	21.4
	Educ	6.1	7.0	4.9	6.3	6.9	5.9	21.1	36.5	26.9
Other relative	Occ	11.3	12.7	7.9	11.2	11.6	8.3	33.3	40.0	35.7
	Educ	10.9	15.8	12.3	9.4	12.8	10.3	26.3	48.1	40.4
Peer friend same sex	Occ	25.0	27.6	28.0	21.0	26.2	26.3	48.2	74.3	76.2
	Educ	29.2	27.8	25.3	26.6	26.6	21.9	52.6	67.3	63.5
Peer friend opposite sex	Occ	0.8	2.0	5.4	0.5	2.2	4.3	3.7	11.4	21.4
	Educ	2.7	7.6	10.1	2.1	7.3	9.2	7.9	25.0	38.5
Teacher	Occ	8.9	8.5	12.2	8.6	6.9	11.6	35.2	28.6	50.0
	Educ	8.8	9.2	11.4	7.8	8.7	8.5	29.0	40.4	42.3
Adult friend	Occ	7.7	5.5	10.4	7.1	6.2	7.8	20.4	20.0	50.0
	Educ	1.4	2.2	5.2	2.1	1.6	5.9	2.6	13.5	23.1
Employer	Occ	1.2	4.0	1.8	0.8	3.6	1.2	5.6	14.3	11.9
	Educ	0.0	0.3	0.0	0.0	0.2	0.0	0.0	1.9	0.0
Unspecified	Occ	3.2	2.5	2.9	2.5	1.8	1.9	----	----	----
	Educ	0.7	1.6	0.6	0.5	1.4	0.4	----	----	----
Totals	Occ	248	199	278	393	275	422			
	Educ	147	316	308	192	436	457			
Occupation:		$X^2 = 31.19, p < .05$ $v = .149$			$X^2 = 43.44, p < .05$ $v = .142$					
Education:		$X^2 = 25.31, p < .20$ $v = .129$			$X^2 = 39.01, p < .05$ $v = .135$ $X^2_{adj.} = 27.92, p < .10$					

mentioned by about the same percentage of students across aspiration levels, mothers are mentioned more frequently as aspiration levels increase. At the same time that parental influence decreases, that of peers increases, although most of this is due to the increase from opposite sex peers. It is fairly clear that those at the higher aspiration levels are more likely to discuss occupational plans with peer friends than are those at the lowest levels. Finally, we note that the influence from teachers also increases, but this increase is not particularly large. It is somewhat surprising that the changes in sources of influence across aspiration levels is not particularly large.

When we examine the sources of influence for educational aspirations, again the pattern of declining influence within the family as aspiration level increases is apparent, although this decline is not as sharp as was the case with occupational others. While these changes are indeed small, they do differ from those found for occupational aspirations. In particular, the relative influence of both parents drops and yet fathers and mothers are more likely to be mentioned as a significant other as the level of aspiration increases. The key difference between educational and occupational influence is for fathers who are generally more influential for occupation. This is particularly clear at the low aspiration levels where fathers are mentioned as occupational SOs by about 83% of the students, but as educational others by only 60% of the sample.

The remainder of the data on educational others shows that, as expected, peer influence increases overall. This is entirely due, however, to the

increase of the relative influence from opposite sex peers. The influence of same sex peers actually declines as aspiration level increases. Here again, we note the differences from occupational others where influence from both types of peers increases, and we attribute the difference to the greater liklihood of seeking information from opposite sex persons for education. Finally, it can be noted that there is a slight increase in the influence of teachers and adult friends across aspiration levels.

It was suggested above that the findings for source of influence by aspiration level may be affected by the fact that the sample includes both males and females, and there is some evidence that the aspiration process may operate differently for them (Rosen and Aneshensel, 1978). The most important aspect of this difference for this research is the measurement of the level of occupational aspiration. The Occupational Aspiration Scale which has been employed locates a person with a small range of points on the occupational prestige hierarchy which that person perceives as desirable or possible for them. Despite the claim of Haller et al. (1974) that the level of aspiration variable operates about the same for males and females, the authors do report higher reliabilities for males and suggest that LOA might be more meaningful for them. Furthermore, while there is general agreement that the prestige hierarchy is basically invariant with respect to sex, and the socioeconomic hierarchy is nearly so (Trieman and Terrell, 1975), it is also clear that males and females have sex typed occupational expectations and that these expectations tend to mirror the distribution of adult occupational attainment (Rosen and Aneshensel, 1978). So even

where the average levels of expectation are close to identical, as in this research, those average scores conceal some very real differences. Finally, there is the problem of how those females who plan to become housewives and not work affects the aspiration measure. This in turn is related to the ways in which marriage plans and age at first marriage affect both aspirations and attainments (Bayer, 1969; Maini, 1978). In summary, there are several factors which may affect the sources for aspiration in unknown ways and hence caution is warranted in interpreting the data for females.

In examining the data for sources of influence by aspiration level controlling for sex as presented in Table 29, the advantage of looking at this data for males and females separately becomes apparent. For example, both the chi square value as well as the measure of association shows that the relationship is much stronger for males than for females. In fact, it is significant only for the male sample. As was hypothesized, it appears very likely that Woelfels' findings (1972) of no relationship were the result of the high percentage of females in his data. In examining the data for each role relationship category, we first note that the drop in influence from within the family is much stronger for males than for females. Although most of that decline comes from siblings and other relatives, the difference between parents as information sources is quite interesting. While the relative influence of both parents on males drops as aspiration level increases, the precent of students who mention a father is relatively constant while those who mention mother increases only

Table 29. Relationship of occupational significant others to subject by level of occupational aspiration and sex of subject for frequency of mention, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Low ASP	Frequency (%) Medium ASP	Frequency (%) High ASP	Influence Index (%) Low ASP	Influence Index (%) Medium ASP	Influence Index (%) High ASP	Percent Mention Low ASP	Percent Mention Medium ASP	Percent Mention High ASP
Father	M	21.0	19.5	14.8	33.2	24.0	23.0	90.6	88.9	90.9
	F	16.2	12.8	11.9	17.1	14.8	14.3	72.7	70.6	85.0
Mother	M	11.2	11.0	8.9	10.8	9.7	9.4	46.9	50.0	54.6
	F	15.2	9.4	13.3	15.3	13.6	17.0	68.2	64.7	95.0
Brother	M	7.0	9.8	1.5	6.3	8.8	1.0	25.0	33.3	9.1
	F	2.8	6.0	5.6	2.9	5.6	5.2	13.6	29.4	30.0
Sister	M	3.5	0.0	1.5	2.7	0.0	1.0	9.4	0.0	9.1
	F	6.7	6.8	4.9	4.7	6.8	5.6	22.7	47.1	35.1
Other relative	M	12.6	9.8	5.2	10.8	9.7	6.3	34.4	33.3	18.2
	F	9.5	14.5	10.5	11.8	13.0	10.0	31.8	47.1	55.0
Peer friend same sex	M	25.0	31.7	31.1	19.7	27.4	28.8	50.0	72.2	72.7
	F	23.8	24.8	25.2	24.7	25.3	24.2	45.5	76.5	80.0
Peer friend opposite sex	M	0.7	0.0	4.4	0.4	0.0	3.7	3.1	0.0	18.2
	F	0.9	3.4	6.3	0.6	3.7	4.8	4.6	23.5	25.0
Teacher	M	4.2	2.4	11.1	4.5	1.8	10.5	18.8	11.1	36.4
	F	15.2	12.8	13.3	14.1	1015	12.6	59.1	47.1	65.0
Adult friend	M	9.1	8.5	12.6	7.6	11.5	9.9	21.9	27.8	54.6
	F	5.7	3.4	8.4	6.5	2.5	6.1	18.2	11.8	45.0
Employer	M	1.4	4.9	3.0	0.9	5.3	2.1	6.3	16.7	18.2
	F	0.9	3.4	0.7	0.6	2.5	0.4	4.6	11.9	5.0
Unspecified	M	3.5	2.4	5.9	3.1	1.8	4.2	----	----	----
	F	2.8	2.6	0.0	1.8	1.8	0.0	----	----	----
Totals	M	143	82	135	223	113	191			
	F	105	117	143	170	162	231			
Males:		X^2 = 36.02, p<.05 v = .228			X^2 = 52.61, p<.05 v = .227					
Females:		X^2 = 16.54, p<.70 v = .152			X^2 = 18.03, p<.50 v = .127					

slightly. On the other hand, while relative parental influence (especially that of mothers) decreases only moderately for females, there is an increase in the percent of these students mentioning each parent. What is of interest here is the relatively constant role of fathers for males and the increasing role of mothers for females across aspiration levels.

When considering the other role categories, we observe that peer influence increases for both males and females, although slightly more so for males. In the case of teachers, it is very interesting to observe their increased importance for males, while for females there is little change as aspiration levels increase. Overall, the data suggest that high aspiring males are more likely to discuss their aspirations with a wider variety of others than are high aspiring females. In the case of the latter, a surprisingly high proportion of information is coming from within the family. Why there should be so little change across aspiration levels for females can only be speculated on at this point. It is interesting, however, that high levels of aspiration for females are not related to increases in communication regarding occupation among peers and teachers. Perhaps it is because, as was suggested above, vocational futures are not particularly salient for high school females.

When we consider the same type of data for educational aspirations and educational others, we find an entirely different situation. In this case, as can be seen in Table 30, the data is significant for females, but not for males. In examining the specific differences, the changes in the relative roles of parents should first be noted. For females, the relative

Table 30. Relationship of education significant others to subject by level of educational aspiration and sex of subject for frequency of mention, influence index and percent mention.

Relationship of other to student	Sex of student	Frequency (%) Low ASP	Frequency (%) Medium ASP	Frequency (%) High ASP	Influence Index (%) Low ASP	Influence Index (%) Medium ASP	Influence Index (%) High ASP	Percent Mention Low ASP	Percent Mention Medium ASP	Percent Mention High ASP
Father	M	15.5	15.0	13.3	20.5	17.9	20.0	51.5	73.9	65.5
	F	18.0	7.4	12.0	20.0	7.4	14.7	66.7	51.7	82.6
Mother	M	13.4	13.3	9.8	15.0	18.5	11.6	46.2	65.0	48.3
	F	20.0	10.3	12.6	23.1	13.1	14.3	83.3	72.4	95.7
Brother	M	9.3	8.0	5.6	8.7	7.9	6.3	30.8	34.8	17.2
	F	6.0	6.4	6.6	5.1	6.7	8.8	25.0	41.4	39.1
Sister	M	6.2	8.0	2.8	6.3	7.3	2.4	19.2	34.8	13.8
	F	6.0	6.4	6.6	6.1	6.7	8.8	25.0	37.9	43.5
Other relative	M	9.3	10.6	12.0	7.2	7.9	9.7	23.1	32.8	41.4
	F	14.0	18.7	12.6	13.8	15.6	10.8	33.3	58.6	39.1
Peer friend same sex	M	34.0	23.0	24.6	30.7	19.9	20.9	57.7	56.5	62.1
	F	20.0	30.0	25.9	18.4	30.5	22.7	41.7	75.9	65.2
Peer friend opposite sex	M	2.1	6.2	9.8	1.6	6.0	8.7	7.7	21.7	27.6
	F	4.0	8.4	10.2	3.1	8.2	9.6	8.3	27.6	52.2
Teacher	M	7.2	10.6	14.1	6.3	10.6	11.2	26.9	34.8	44.8
	F	12.0	8.4	9.0	10.8	7.8	6.4	33.3	44.8	39.1
Adult friend	M	2.1	2.7	7.0	3.1	2.0	7.8	3.9	13.0	27.6
	F	0.0	2.0	3.6	0.0	1.4	4.4	0.0	13.8	17.4
Employer	M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	F	0.0	0.5	0.0	0.0	0.4	0.0	0.0	3.5	0.0
Unspecified	M	1.0	1.8	0.7	0.8	2.0	0.5	----	----	----
	F	0.0	1.5	0.6	0.0	1.1	0.4	----	----	----
Totals	M	97	113	142	127	151	206			
	F	50	203	166	65	282	251			
Males		$X^2 = 20.48$, $p < .50$ $v = .172$			$X^2 = 29.53$, $p < .05$ $v = .176$ $X^2_{adj} = 21.59$, $p < .30$					
Females		$X^2 = 3.65$, $p < .05$ $v = .190$			$X^2 = 33.90$, $p < .05$ $v = .169$					

influence of both father and mother drops sharply, although the percentage of students mentioning them increases as aspiration levels increase. On the other hand, the relative influence of fathers for females remains fairly constant, while that of mothers drops off slightly.

The other role relationship categories also allow for some interesting comparisons. For example, the relative influence of same sex peers decreases for males as aspiration increases, but increases for females. That of opposite sex peers increases for both. And, as was the case with occupation, we find that teacher influence increases for males, but decreases slightly for females. The declining role of peers for males should be compared with their increasing role for occupation as aspiration level increases. This may be indicative of the lower salience of education for males. And, the comparative role of teachers for males and females across aspiration levels may help to explain why males are more likely to translate school success into higher achievement levels.

A careful examination of the data points to an apparent anomaly that requires some explanation. The pattern of educational influence for females across aspiration levels tends to be curvilinear. For example, parental influence declines sharply at the middle levels and then increases at the highest level. Some of this is no doubt related to sampling fluctuations due to the small percentage of females in the low aspiration category. But, it appears that more attention needs to be paid to what happens at the upper end of the scale. In this case we suspect that the highest levels of educational aspiration take on special meanings for females. One apparent consequence is that parents become more influential at this

level than at the level of moderate aspirations. This is another area that requires more research.

E. Definers and Models as Sources of Influence

Up to this point, we have considered any individual as a source of influence regardless of the mode through which that influence was transmitted. Theorists of interpersonal influence, however, have continually made a distinction between those who hold and communicate expectations for ego (definers) and those who serve as models for egos behavior and aspirations (Kelly, 1952; Merton, 1957). While this distinction has been important, there is surprisingly little data on the impact of these alternative modes of influence. In one of the few published studies on this point, Picou and Carter (1976) have shown that peer modeling has a stronger effect on aspirations than does peer, parental or teacher expectations. And more important, the magnitude of this correlation increased as one moved from urban to rural areas. The position that some influential agents exert their influence through modes distinct from that of others needs further exploration. The measurement of significant other influence in this project allows us to examine various categories of others in terms of whether influence was exerted by providing information about self and/or object through either the definer or model modes (see above, p. 5-6). It further allows us to compare the roles of definers and models for occupational and educational aspirations.

The first step in the analysis will be to compare educational and occupational others in terms of the relative roles of definers and models.

In making this comparison, we would hypothesize that models, particularly models for object, (achievement models) would be more important for educational aspirations than for occupational aspirations. The basic line of reasoning is that the influence of models should increase the more observable the object of the attitude. In comparing occupation with education, there are two points to be made. First, students participate in educational virtually everyday, while their contact with the occupational world is far more limited. Second, it is fairly likely that a high school student will be familiar with each point on the educational hierarchy and has probably had contact with at least some others at various levels of attainment. On the other hand, students are probably familiar with only a limited segment of the occupational structure. While this probably holds for most high school students, the argument is more compelling in the case of rural areas where the occupational structure is fairly restricted.

The data, presented in Table 31, generally supports this hypothesis.[4] While definers for object provide the most information and models for

Table 31. Percentage of influence transmitted through each mode of influence for occupation and education.

	Mode of Influence				
Aspiration	Definer-object	Model-object	Definer self	Model-self	Total
Occupation	39.2	20.6	23.8	16.5	1148
Education	38.4	27.4	20.1	14.1	1085

$x^2 = 16.42$, 3 d.f.
$p < .01$

self (aspiration models) the least, it is clear that achievement models are more important for education than for occupation. The only other significant difference is in the case of definer for self. In general it appears that information regarding self is more salient in the case of occupation than education.

Since we have consistently found important differences by sex, we next compare males and females by mode of information for occupation and education. This data, presented in Table 32, is very interesting. The first thing to note is that definers are more important for females than for males. The converse that models (and particularly, achievement models) are more important for males is most clearly seen in the case of occupation. This is especially clear when we compare the relative influence of role models for occupation with that of education. For both males and females achievement models are more important for education than for occupation, but the difference is far larger for females.

Table 32. Percentage of influence transmitted through each mode of influence for males and females by occupationa and education.

		Mode of Influence				
Aspiration	Sex	Definer-object	Model-object	Definer-self	Model-self	Total
Occupation	M	37.6	23.4	21.6	17.4	569
	F	40.8	17.8	25.9	15.5	579
Education	M	37.0	29.8	18.4	14.9	484
	F	39.6	25.5	21.5	13.5	601

Occupation: $x^2=7.90$, 3 d.f. $p < .05$ Education: $x^2=3.92$ $p < .30$

Some of the most interesting comparisons can be made when we ask: are some agents of influence more likely to transmit influence through particular modes. Table 33 presents data on the percentage of information transmitted from each role category via each mode for occupation and education. In the case of occupation it can be easily seen that parents provide the bulk of their influence through the two definer modes: 76.2% for fathers and 85.7% for mothers.[5] At the same time, other relatives teachers and adult friends transmit a sizable amount of information via modeling. And, as might be expected, same sex peers communicate more information as aspiration models than via any other mode.

In the case of educational influence, parents again transmit the bulk of their influence through the definer modes. At the same time, it is interesting to observe that models for object become an important source of information for a number of role categories, especially when compared to occupation. This is seen clearly in the case of siblings, other relatives and opposite sex peers. The most likely reason for this is that more persons can potentially serve as achievement models for education than for occupation. So, for example, a brother or sister may have achieved a level of education which ego seeks to emulate, but at the same time be an occupant of an occupation that is not seen as desirable or possible. The exception to this pattern is for teachers who were less likely to transmit influence by being an achievement model for education than they were for occupation. This situation is more difficult to explain. It appears that teachers are more likely to transmit information

Table 33. Percentage of occupational and educational influence transmitted through each mode of influence by relationship of other to student.

Relationship of other to student	Type of other	Mode of Influence: Definer-object	Model-object	Definer-self	Model-self	TOTAL
Father	Occ	46.3	19.7	29.9	4.1	244
	Educ	50.6	16.1	29.8	3.6	168
Mother	Occ	50.6	10.4	35.7	3.9	154
	Educ	52.2	14.9	31.7	1.2	161
Brother	Occ	45.3	13.2	28.3	13.2	53
	Educ	28.4	43.2	17.3	11.1	81
Sister	Occ	42.5	12.5	32.5	12.5	40
	Educ	33.3	40.5	11.6	14.5	69
Other relative	Occ	35.7	30.4	21.4	12.5	112
	Educ	24.0	57.0	13.2	5.8	121
Peer friend same sex	Occ	27.7	13.8	14.2	44.3	282
	Educ	31.5	19.5	10.9	38.2	267
Peer friend opposite sex	Occ	44.4	7.4	22.2	25.9	27
	Educ	34.6	38.5	12.8	14.1	78
Teacher	Occ	39.8	32.7	23.9	3.5	113
	Educ	53.3	17.4	29.3	0.0	92
Adult friend	Occ	28.0	45.1	19.5	7.3	82
	Educ	31.6	31.6	28.9	7.9	38
Employer	Occ	61.0	16.7	11.1	11.1	18
	Educ	0.0	0.0	100.0	0.0	1

about occupation through modeling because of their impact on those who aspire to teaching or to a similar occupation. Since definer influence is exerted by communicating expectations directly to ego, we are again struck by the relatively small role of teachers in the occupational aspiration process.

Some of these patterns are clarified when we look at the same data controlling for sex. Table 34 shows the percentage of occupational influence transmitted from each role category through each mode for males and females. The first thing to observe is the definer-model difference for parents. Fathers, for example, are less important for females than for males as definers, but their role as achievement models for males is more important than it is for females. The situation for mothers, as one might expect, is just the opposite: they are more important for females as models than they are for males. The same kind of sex linked pattern also holds for brothers, and peer friends of both sexes. That is, achievement models are apparently of the same sex. (This general pattern was thoroughly discussed in Section B above). Finally, we note that teachers provide more influence for females as models than they do for males. This may be related to the greater liklihood of females who aspire to a teaching career. At the same time, note the importance of teachers as definers for self for males as opposed to females. Once again it becomes apparent that teachers influence is not only relatively small, but in the case of females, most of it is indirect.

The data in Table 35 shows that the sex linked pattern for models

Table 34. Percentage of occupational influence transmitted through each mode of influence by relationship of other and sex of student.

Relationship of other to student	Sex of student	Mode of Influence: Definer-object	Model-object	Definer-self	Model-self	TOTAL
Father	M	42.3	22.4	29.5	5.8	156
	F	53.4	14.8	30.7	1.1	88
Mother	M	61.0	3.4	30.5	5.1	59
	F	43.2	14.7	38.9	3.2	95
Brother	M	33.3	18.5	22.2	25.9	27
	F	57.7	7.7	34.6	0.0	26
Sister	M	50.0	25.0	25.0	0.0	8
	F	40.6	9.4	34.4	15.6	32
Other relative	M	27.7	44.7	21.3	6.4	47
	F	41.5	20.0	21.5	16.9	65
Peer friend same sex	M	25.0	20.0	10.0	45.0	140
	F	30.3	7.7	18.3	43.7	142
Peer friend opposite sex	M	55.6	0.0	11.1	33.3	9
	F	38.9	11.1	27.8	22.2	18
Teacher	M	36.6	26.8	29.3	7.3	41
	F	41.7	36.1	20.8	1.4	72
Adult friend	M	32.1	41.5	18.9	7.5	53
	F	20.7	51.7	20.7	6.9	29
Employer	M	50.0	17.7	16.7	16.7	12
	F	83.3	16.7	0.0	0.0	6

Table 35. Percentage of educational influence transmitted through each mode of influence by relationship of other and sex of student.

Relationship of other to student	Sex of student	Mode of Influence: Definer-object	Model-object	Definer-self	Model-self	TOTAL
Father	M	47.9	16.7	30.2	5.2	96
	F	54.2	15.3	29.2	1.4	72
Mother	M	47.9	18.3	31.0	2.8	71
	F	55.6	12.2	32.2	0.0	90
Brother	M	16.7	52.8	16.7	13.9	36
	F	37.8	35.6	17.8	8.9	45
Sister	M	20.8	70.8	0.0	8.3	24
	F	40.0	24.4	17.8	17.8	45
Other relative	M	24.4	65.9	7.3	2.4	41
	F	23.8	52.5	16.3	7.5	80
Peer friend same sex	M	29.5	22.3	6.3	42.0	112
	F	32.9	17.4	14.2	35.5	155
Peer friend opposite sex	M	37.9	34.5	3.4	24.1	29
	F	32.7	40.8	18.4	8.2	49
Teacher	M	53.2	19.1	27.7	0.0	47
	F	53.3	15.6	31.1	0.0	45
Adult friend	M	34.8	26.1	30.4	8.7	23
	F	26.7	40.0	26.7	6.7	15
Employer	M	0.0	0.0	0.0	0.0	0
	F	0.0	0.0	100.0	0.0	1

is considerably weaker in the case of educational others as was also discussed earlier in this report. For example, observe that the percentage of influence communicated by fathers via modeling is about the same for males and females. On the other hand, mothers communicate a larger percentage of their influence through this mode for males than for females. Overall, the primary reason that we see less of a difference between males and females for each mode, compared to occupation, is that significant others of both sexes can be role models for education. Since the occupational structure is more gender related (Oppenheimer, 1968), this is less likely to be the case for occupational role models.

An analysis of the modes through which influence was transmitted by occupational and educational others was done for all of the variables described earlier and the data is presented in Table 36. An examination of the chi square values shows that there are no significant relationships. In other words, a student's year in school, their family SES, place of residence, and their activity and aspiration levels seem to have no relationship with whether or not that student is receiving influence through the definer or model modes. It is also interesting to note that the small relationships that do occur tend to be stronger for occupation than for education. Of the whole set, the only variable that approaches significance is that of residence in the case of occupational others. In this instance we can see a notable decline in definer influence and a concomitant increase in model influence for those who live in town as contrasted with those who live on a farm. While this may be due to the wider

Table 36. Percentage of influence transmitted through each mode of influence for occupational and educational aspirations by selected sample characteristics.

Sample characteristics	Type of aspirations	Mode of Influence: Definer-object	Model-object	Definer-self	Model-self	TOTAL
Year in school						
Freshman/ Sophomore	Occ	40.0	22.5	21.9	15.6	512
	Educ	36.9	27.9	20.2	15.1	491
Junior/ Senior	Occ	38.5	19.0	25.3	17.1	636
	Educ	39.7	26.9	20.0	13.3	594
		X^2(Occ) = 3.60, p<.50		X^2(Educ) = 1.27, p<.80		
Socioeconomic status						
Low	Occ	41.2	18.5	23.7	16.6	379
	Educ	39.8	27.3	18.7	14.2	337
Medium	Occ	39.6	21.5	25.7	13.2	288
	Educ	37.9	27.0	21.4	13.7	322
High	Occ	37.7	21.3	22.6	18.5	470
	Educ	37.5	27.8	20.3	14.4	424
		X^2(Occ) = 5.51, p<.50		X^2(Educ) = 1.01, p<.99		
Residence						
Farm	Occ	44.0	17.2	26.0	12.8	273
	Educ	38.5	26.5	20.8	14.2	260
Town	Occ	37.6	22.0	23.3	17.0	781
	Educ	38.6	27.5	19.4	14.5	731
		X^2(Occ) = 7.17, p<.10		X^2 (Educ) = 0.25, p<.99		
Extracurricular activities						
Low	Occ	37.0	23.5	22.5	17.0	289
	Educ	39.5	27.7	18.6	14.2	253
Medium	Occ	41.7	20.3	22.9	15.1	516
	Educ	36.3	28.8	19.4	15.4	479
High	Occ	37.3	18.4	26.2	18.1	343
	Educ	40.5	25.2	22.1	12.2	353
		X^2(Occ) = 5.92, p<.50		X^2 (Educ) = 4.65, p<.70		
Level of Aspiration						
Low	Occ	37.4	21.1	26.0	15.5	393
	Educ	38.5	29.7	19.3	12.5	192
Medium	Occ	44.0	19.3	18.2	18.5	275
	Educ	35.6	28.2	20.4	15.8	436
High	Occ	37.9	20.6	25.4	16.1	422
	Educ	41.1	25.6	20.1	13.1	457
		X^2(Occ) = 8.20, p<.30		X^2(Educ) = 4.49, p<.70		

availability of models in a larger residential area, the differences are small enough to warrant caution in interpretation.

Perhaps the most important finding in Table 36 is that the proportions of influence transmitted through the various modes is remarkably similar across all of the variables. Since there is the possibility that some relationships may have been suppressed by using the entire sample, the analysis was repeated for males and females separately. Again, however, with one exception, no significant differences were found. The exception was in the case of occupational influence for male students by residential location. The findings indicated that males who live in town receive much more influence via the model modes than those who live on a farm. The relatively small amount of information coming from models for farm males is probably due to the farm orientation of this group which serves to reduce the number and variety of models.

Despite this one finding, it is the consistent lack of differences that is both interesting and surprising. One might expect, for example, that the role of both achievement and aspiration models would increase for higher status students because of the greater contact with high achievers and high aspirers. One might further expect that those students more involved in extracurricular activities would obtain more information from aspiration models due to greater peer interaction. While the data show some very small tendencies in this direction, none of the differences are significant.

Generally speaking, the role relationship data reported above (section D) is far more informative with respect to the interpersonal

influence is transmitted than is the data on modes of influence. If the data base were large enough it might be valuable to see whether particular agents of influence vary in the modes through which they transmit information controlling for such factors as family SES and aspiration level. Although this data is not adequate for such an analysis, the above data on modes of influence suggest that such an analysis would not yield very much. In other words, the data seems to support the somewhat surprising conclusion that the proportions of influence transmitted through the various modes is relatively constant with respect to family SES, and activity and aspiration levels, and controlling for sex does not alter this finding.

Summary and Discussion

The preceding sections represent an attempt to identify and analyze the sources of influence in the occupational and educational decision making process of rural youth. The primary focus has been on how much influence was transmitted by the incumbents of various roles and the way this varied by the type of aspiration and a number of factors that are related to the aspiration process. While a complex set of data has been presented, there are a few findings which have emerged with clarity. The purpose of this section is to summarize those findings and discuss their implications.

One of the most important findings in this report has to do with the differences in the sources of interpersonal influence for occupational and educational aspirations. Since these aspirations are so closely

related, it was expected that there would be a considerable amount of overlap between the sources of information for them. We found, however, a surprising tendency for significant others to be attitude specific. The data showed that any given other was more than twice as likely to be influential for either occupation or education only than over both aspirations. A careful examination of the data showed that the incumbents of some roles were more likely to exert influence over a broader scope of attitudes than were the incumbents of others. As might be expected, parents were the most likely to be significant others for both occupation and education, while peers and teachers tended to exert their influence over either occupation or education about equally.

Although this analysis showed that the influence of individual others was segmental, when we examined the amounts of influence transmitted through various role relationship categories for occupation and education, we found the overall patterns to be quite similar. For example, in both cases peers accounted for the largest amount of information and parents were second. The data clearly shows that there is a high probability that students will choose SOs from the same role categories for occupation and education, but they select different individuals within these categories as sources of information for each aspiration.

Despite the high correlation between occupational and educational sources of influence by role relationship, a close examination of the data also highlighted a few important differences. In general, there was a tendency for the sources of information for occupation to be more likely

to be of the same sex as the student than was the case for education. Thus, fathers were more likely than mothers to be influential for occupation, but for education their influence was about equal. And, there were similar differences between siblings and peer friends. It is clear that the sex of the other is more important in the choice of occupational SOs than it is for educational others.

Given the differences between occupational and educational others, we then asked whether the sources of influence would vary with the student's year in school, their family socioeconomic status, residential location, extracurricular activity level, and level of occupational and educational aspiration. Overall, significant relationships were found in almost all cases, although these relationships were stronger for occupation than for than for education. Furthermore, in the case of occupational influence, we observed a consistent pattern of declining parental influence and increasing peer influence as the student progressed through school, came from higher SES backgrounds, were more involved in school activities and had higher aspirations. While the same pattern tended to hold for educational others, it was considerably weaker.

As a last step in the analysis, we tried to determine whether definers or models were of differential importance for occupation and education. Given students participation in and familiarity with the educational hierarchy, we expected and found that achievement models were more important for education than for occupation. We further observed, somewhat surprisingly, that the proportion of influence transmitted through the various modes was

was constant when we controlled for the other variables in the study. So, a student's family background or aspiration level do not appear to alter the likelihood of receiving information from models or definers.

While these differences between occupational and educational others are interesting, of far greater significance are the differences between males and females in their sources of information for the two aspirations. While the literature provides evidence that the aspiration and attainment process differs for males and females, there is little data on how this affects the sources of information. Yet differences between males and females in this regard showed up consistently through the data. These differences can be most plausibly explained by considering the differential socialization of males and females, particularly as it is related to the different levels of occupational and educational attainment that is typically found for the two sexes.

By now it is no secret that the occupational system is segregated by sex (Featherman and Hauser, 1976) with women particularly underpresented at the higher levels of the occupational structure. While some of this is no doubt due to discrimination, Rosen and Anashensel (1978) have cogently argued that many of the barriers to female achievement begin early in the attainment process and are largely a consequence of traditional socialization practices. The reason for this is that the socialization of males places more emphasis on occupational achievement, while that of females is directed towards marriage and thus stresses interpersonal and "social" skills. One consequence of this is the differing functions

education has for males and females. It is fairly clear that educational performance and aspirations are instrumentally linked to occupational goals for males. For females, on the other hand, education is only one means of attaining status. This does not imply, however, that females will have low educational aspirations for at least two reasons. First, an increasing number of females expect to work at some point in their lives and so education is becoming more utilitarian for them. And second, as Angrist (1969:226) has argued, higher education can be important to a women for a variety of reasons including social experience and mate finding. So even with educational expectations that equal or exceed those of males, we still find different factors affecting the aspiration processes of females.

The data presented in this report shows that these socialization differences are reflected in differences in sources of influences for occupational and educational aspirations. For example, the data showed that male students were more likely than females to have others who were significant for occupation only. Furthermore, there are clear differences between males and females in the sources of information. This is particularly true in the case of occupational others. In this instance the choice of same sex others for males becomes particularly noticeable. For example, fathers were much more important for males than were mothers, but the two parents were of about equal importance for females. We also noted a tendency for males to turn to adults outside of the family for information about occupation. On the other hand, adult friends and employers play a

very small role for females. The lack of occupational role models for females is quite noticeable. Although teachers represent an exception, this type of role model is representative of a sex stereotyped occupation.

Males-female differences became even more clear when we looked at the effects of other variables on sources of influence controlling for sex of the student. In the case of occupational others the variations we observed in the kinds of persons who influence students for each variable in the analysis were usually far stronger for males than for females. So for males at least, high status youth choose different significant others than do middle or low status youth; rural youth different SOs than those that live in town; and high aspirers have different role relationships with SOs than do medium and low aspirers. For females, the relationships were much smaller, and, in several cases, not statistically significant.

When we examine some of the specific changes for selected role categories, we can see more clearly what occurs. For example, fathers' influence shows a negligible change over year in school for males, while both parents decline in influence for females. Similarily, male students who live in town receive less parental influence than those on the farm, while the opposite is true for females. And fathers' relative influence declines sharply for high aspiring males compared to those with low aspirations. While peer influence increases sharply in all categories for both males and females, there are important changes in the position of teachers. Generally speaking, teachers' relative influence increases more for males

than for females as the student gets older, if they come from a high status family, if they live in town and if they are a high aspirer. The overall picture that is obtained in this analysis by role category indicates again the greater salience of occupational futures for males than for females.

In the case of educational others, the patterns are more mixed and thus more difficult to interpret. Nevertheless, they tend to support the differential socialization hypothesis as well as the interpretation of the different meanings placed on educational attainment by males and females. If the hypothesis that females use educational attainment as a mechanism for attainment in areas in addition to occupation (for example, marriage), then we would expect a number of things. First we would expect stronger differences for females than for males in sources of influence. With the exception of year in school and activity level, this tends to hold true. Next, we would expect to see sharper declines in parental influence and stronger increases in peer influence across the categories of the control variables for females and for males. Again, this tends to be true. And finally, we observed little change in teacher influence for females, while their influence tended to increase across the categories of the control variable for males. This is consistent with other research which has found that males more often perceived teacher encouragement for education (Hauser, et al., 1976).

As a final example of male-female differences we turn to the modes through which influence was transmitted to these students. One of the

clearest findings here is the greater importance of role models for males for occupation compared to the influence of role models for females. On the other hand, role models are more important for females for education than they are for males. And finally, when we look at the modes through which different categories of others transmitted information, we noted that occupational role models were most likely to be of the same sex. Given the occupational segregation by sex that currently exists, we must again raise the question of whether female students are receiving adequate information to reach higher levels of attainment.

With these differences between occupational and educational others and the differences by sex in mind we can profitably return to the question of the differential importance of those who are usually considered to be the key agents of influence in the aspiration process: parents, teachers and friends. Certainly one of the key findings of this research is that while these three categories constitute a sizable proportion of influence, no researcher should ignore siblings, other relatives and adult friends in the process of aspiration formation. And, when trying to assess the relative influence of parents, peers and teachers, the question of who is most significant can be shown to vary under a number of conditions and the perspective that is taken. For example, in this research, peers typically exert the same or more influence than do parents. And, for students who are juniors or seniors, who come from high status families, who live in town, have high extracurricular activity levels, and who have high aspiration levels, peers

exert considerably more influence than do both parents combined. Even in these cases, however, a larger percentage of students are likely to mention a parent as an other than a peer friend. Additionally, there are two other respects in which the influence of parents can be seen more readily. In the first place, parents typically exert their influence through multiple modes, while peers do so through one mode. And, perhaps more important, parents have likely exerted their influence over a longer period of time. So while one should not play down the significance of peers in the aspiration process it seems likely that over a span of time a selection process takes place whereby the peers that are influential at any given point serve to ratify the information already transmitted by parents. This is a very important area for further research.

The final category of other to be considered is that of teacher. This research is consistent with past literature in showing the relatively small role of teachers in the formation of educational and occupational aspirations. But again, we must be somewhat cautious in our interpertations. In the first place, teachers have a large impact on the social system because the average teacher is likely to influence more students than is the average peer. And finally, we should not fail to note that teachers are more influential for some groups of students rather than others.

The variable role of parents, teachers and peers, however, serves to raise some serious questions about the aspiration process particularly as it relates to male-female differences and to students from different

backgrounds and those with different levels of aspiration. Unfortunately, our data is not sufficient to explain such things as the extremely small amount of influence provided by teachers to those of low socioeconomic status and to those with low aspirations. Perhaps longitudinal research would permit a more accurate rendering of what is involved.

Finally, with respect to the male-female differences that have been discussed, one must keep in mind that the content of significant other influence is far more important in the attainment process than are the sources of that influence. As long as most persons hold and transmit expectations for others based on their gender, the barriers to female achievement will remain. A change in the sources of influence alone will not necessarily result in a change in aspirations and attainments. But, given the importance of role models for occupation, increased contact with women who are in non-traditional occupations could be very helpful.

FOOTNOTES

1. This line of argument is consistant with Maccoby and Jacklin's (1974) thorough analysis of sex differences. In particular, they have shown that there is little empirical support for the notion that girls are more social than boys, but rather that males and females differ in their social experiences. Our analysis of the number of significant others follows this approach.

2. This table and the ones following present some unusual problems for the application of standard chi square techniques. The most typical usage involves a contingency table in which each individual is simultaneously classified on two variables. In Table 12, however, the sample consists of sources of information for occupational and educational aspirations. Many of these sources are the "same" individual exerting influence over different students and/or different aspirations. Considered as a source of information, though, each is considered as a distinct entity. So the 1433 "persons" are considered as a sample of sources of information for both aspirations. The questionnaire eliciting SOs is viewed as a procedure for classifying these sources. It is uncertain as to how this affects the assumption of independence and hence the validity of the chi square statistic. The problem of independence is less serious in the other tables where only occupational or educational others are examined.

   In addition to this caveat, the interpretation of chi square in these tables presents an additional problem. As Reynolds (1977:10-11)

has pointed out, this test, if significant, does not tell one how the variables are related or where the model of independence breaks down. While a number of approaches are possible, the conclusions we have drawn are based on an examination of the percentages as well as on those cells that contribute the most to the chi square.

3. It is well known that the magnitude of chi square is related to the sample size (Blalock, 1979). In fact, if the proportions in the cells remain identical, chi square varies directly with N. Since the influence index is a so highly correlated with the frequency scores, it was possible that the higher chi square value was simply a function of the larger sample size for this index. The adjusted value of chi square (X^2adj) is an attempt to correct for this. The reader should also note the value of the measure of association (V) for this too is not sensitive to variations in sample size.

4. As in the earlier tables the use of the chi square statistic is somewhat unusual. Again, we have considered each source of information as a separate case. So a significant other who transmits information through three modes, for example, is counted in this analysis three times because each constitutes a distinct source of information. The cautions suggested in footnote 1 apply with equal force in this table.

5. The fact that a few students listed parents and other adults as aspiration models might raise a question about the validity of the data as this type of response should theoretically be impossible. A careful examination of the questionnaires of these students, however, provides

no bases for eliminating this data. It seems more plausible that some students interpreted the question eliciting models for self in such a way that an adult would be a sensible response. For example, one of the items designed to elicit occupational models for self read: "Who do you know who is like you are in being suited for the same kinds of work?"

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